



MASE Newsletter

MAINE ASSOCIATION OF SITE EVALUATORS

August, 2010

MASE Training Opportunities

MASE members as well as all Site Evaluators and other licensed professionals are well aware that education and training are now critical factors in renewing your license and maintaining your right to practice in the State of Maine. As the size and complexity of the Maine Subsurface Wastewater Rules increases with each passing year, with constantly changing, confusing, and often conflicting requirements, it is no wonder that today's Licensed Site Evaluator needs to keep abreast of the latest technical and regulatory developments. In these difficult economic times, we may find that we have more time than money to devote to training.

MASE, in cooperation with other professional groups, state agencies, and other organizations, has worked hard to provide our members with training opportunities that are both reasonable in cost and directly applicable to the work that we do. Since training credits have been a mandatory requirement of Site Evaluator Licensure, MASE has directly or indirectly helped to provide training opportunities to its members for little or no cost. The annual technical seminar, field day training, and field soil seminar have been low cost sessions that more than supplied the necessary training hours for re-licensing.

Thanks to generous donations by Construction Consultants, Inc, Eljen Corporation, and others, MASE is happy to announce more training opportunities for Site Evaluators and wastewater professionals. MASE has partnered with the Maine Rural Water Association (MRWA) to develop a subsurface wastewater disposal training center located at 254 Alexander Reed Road in Richmond. The training center will offer one day training seminars during the month of October. The center will feature installed examples of several types of septic systems including the most common proprietary devices, samples of fill, and other topics of interest. For more information see the article on page 3.

MASE will continue to offer other low cost training sessions during the fall with a training session at Saddleback Mountain, and the site evaluator exam test pit field day, as well as the annual meeting and technical seminar during the winter. Check inside for more details!

What's inside....

President's Message	2
Maine's New Subsurface Wastewater Training Center.....	3
Science Based Rules?	5
A Look Back at Septic System Designers.....	6
What the Heck is the GeoLibrary?.....	7
University of Maine Engineers Without Borders.....	9
Treasurer's Report July 1, 2010.....	10
20th Annual MASE Golf Tournament	11
MASE Technical Review Committee Report: Rules Update	12
Saddleback Training Seminar	13
Training Center Construction Completed.....	17
2010 Annual Meeting Minutes.....	19
MASE News Briefs.....	21
Calendar	22



**2009 MAPSS/MASE
Field Day**

Message From MASE President Gary Fullerton



It has been a tough summer economically for everyone who's trying to make a living in the development world. I hope that things start changing before cold weather hits or this is going to be a long winter. There is some exciting news among all the gloom! MASE members will soon have something to be proud of. The Executive Board and Education Committee along with the Division of Environmental Health have been busy planning the new "Subsurface Wastewater Training Center" in Richmond. The center should be substantially constructed by the time you finish reading this newsletter. The planning started in April and has continued through to the construction phase and we look forward to the training workshops in October. With the help of the Maine Aggregate Association, MASE was able to obtain all of the gravelly coarse sand and crushed stone at no cost. Our usual vendors came through with supplying the proprietary devices and miscellaneous pipe at no cost as well. Mike Deyling of Summit Environmental Consultants supplied the skid steer and excavator (Thanks, Mike!). All of the aggregate samples have been tested by Summit and S.W. Cole Engineering at no cost. If anyone is interested in visiting the center, it is located at the Maine Rural Water Association office in Richmond (254 Alexander Reed Road).

The MASE Technical Review Committee is working with the Division to wrap things up before the public hearing on the new Rules. The only event we had since the annual meeting was the 20th Anniversary Golf Tournament (see Dave Kamila's article). Upcoming events include the "Cool Climate Soil, Hydrology, and Site Evaluator Soil Pit Classification Workshop" to be held on September 1st, the MASE/MAPSS Field Day to be held on September 30th in southern Maine, and the training center workshops to be held October 13, 14, 19, and 20. This fall should be very busy for MASE and we hope that many members come forward to help with these events – "Many hands make light work". If you are interested in helping with the training workshops, please let us know.



MAINE ASSOCIATION OF SITE EVALUATORS

August, 2010 Newsletter

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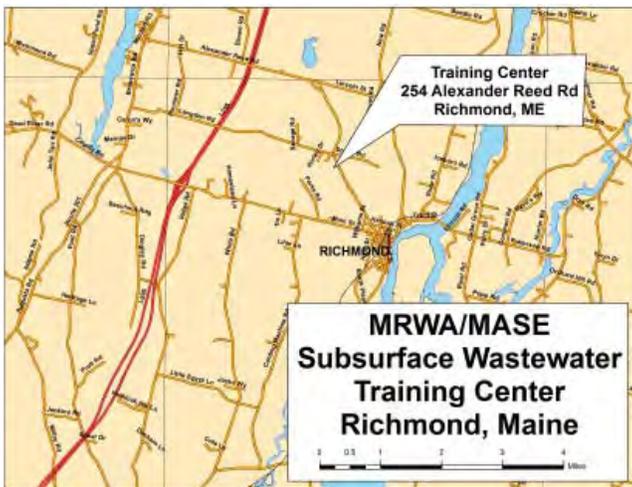
Maine's New Subsurface Wastewater Training Center

By David Marceau, MASE Education Committee Chairman

Since our last annual meeting in February of 2009 the MASE Executive Board and Education Committee have been working with the Maine Rural Water Association (MRWA) and the Department of Health and Human Services (DHHS) to develop a subsurface wastewater training center in Richmond, Maine. The goal of the training center is to provide educational workshops on the design, materials, construction methods and details, inspection, and other aspects of subsurface wastewater disposal systems and their components. The training will benefit site evaluators, LPI's, code officers, installers and other wastewater professionals. The training center is currently under construction, with a series of training sessions planned for October 13-20, 2010.



The center is located at MRWA's new office on 254 Alexander Reed Road in Richmond. Training sessions will combine both classroom and field training. MRWA's newly remodeled building contains a beautiful state of the art classroom where topics such as rules and regulations, setbacks, and calculation of fill extensions will be covered. But it is the training center's unique outdoor classroom that will offer the unique hands-on opportunity to observe and discuss a variety of septic system technologies in real world installations. The outdoor classroom will consist of a series of training stations, or "pods" around the training center property. Each pod will contain an actual installed example of some type of septic system technology or product, including conventional stone and pipe disposal beds, proprietary devices, treatment tanks, pumping stations, piping, distribution boxes, and more. The installations will use actual materials and products donated for use at the training center, with accessible areas to allow viewing of features which are normally buried. Several different materials and proprietary devices will be installed, and other products may be available as displays at the site. Field training for test pit evaluation, slope determination, setback measurement, and wetland identification are also planned. It will be a great opportunity to get your hands dirty, but not too dirty (the systems will not contain actual wastewater).



The Subsurface Wastewater Training Center is being built with a combination of monetary contributions and donations of materials, products, labor, and services. MASE has used the money donated by Construction Consultants and the Eljen Corp. as well as funds appropriated by the board and contributions from MASE vendors to establish the center. MRWA has provided the land, buildings, and other facilities to house the center. The DHHS has assisted by attending numerous meetings, planning the various stations, and performing construction overview, and providing and training instructors. Several companies and excavating contractors have donated products and materials for use by the center. A partial list of donations received is included at the end of this article.

This has been a large undertaking by MASE. Many hours have been donated by the MASE board and the education committee in the planning and coordination of this facility. It is our hope that the facility will provide a hands-on approach to understanding all issues related to subsurface wastewater disposal in Maine. We have planned for small interactive groups and will have “experts” at every station to answer questions and explain how the various devices function. We also have planned for the facility to be dynamic in that it will adapt to changes in technology and will be a state of the art facility for people to learn about subsurface wastewater disposal in Maine. A few



of the details of the proposed training include: running sieve analysis on several fill materials to gauge backfill specifications, having open cross sections of each type of proprietary device for attendees to observe and explaining how each component is plumbed.

The training days that have been established are October 13, 14, 19, and 20 with rain dates of the 15 and 21 if necessary. We know that times are hard in our industry so we have tried to keep the cost of attending training events at the facility as reasonable as possible (\$55 advance, \$70 at door.). We feel that this is a worthwhile endeavor for MASE because it will provide many site evaluators contact with non-site evaluators and accomplish a number of the directives established in our bylaws.

So if you have questions about how many inlets and outlets a septic tank has, the size of a particular device or what gravelly, coarse sand is, plan to attend the wastewater treatment center in Richmond on one of the four planned training days in October. You will receive a flyer in the mail detailing additional information about the training days and the method to sign up. For additional information you may contact David Marceau at 236-4365 or Gary Fullerton at 865-0277 x256.

Recognition goes out to the following sponsors for making this training center possible:

Advanced Drainage Systems
Aeration Systems
American Concrete Industries
Construction Consultants
Eljen Corporation
Infiltrator Systems
J & R Sales and Service
Maine Rural Water Association
Northeast Waste Tec
Oakson
Precast of Maine

Presby Environmental
Starbird Contractors
Summit Environmental Consultants
S.W. Cole Engineering

Aggregate provided by:

Ray Labbe & Sons
Scott Lyon Construction
Quirion Construction
Ferraiolo Construction

Science Based Rules?

By David Marceau, LSE # S246, CSS #182

In my opinion, the proposed changes to the Subsurface Wastewater Disposal Rules are much closer to a scientifically based set of rules. This format invokes a lot of discussion from all points of view because the rules affect land use beyond septic systems and many non-scientists are licensed to practice as site evaluators. A few of the proposed changes include using Munsell colors as a basis for describing soil colors, modifying the standards for fill that is allowable for first time systems and clarifying the standards that are necessary to install septic systems adjacent to significant wildlife habitats. Although these changes are proposed, we still have a ways to go.

I consider myself primarily a scientist. The world of science involves the systematic study and experimenting of hypothesis. As a scientist, I believe that the base of knowledge for a given subject constantly evolves and that the evolution takes place with some checks and balances like peer reviews and the defending of one's thesis. The changes in science and technology have been the primary reason why I have been able to stick with my professions as a soil scientist, site evaluator, and wetland scientist. The evolutions that have taken place and the fact that each professional organization provides a forum by which its members can exchange their ideas and express their opinions have allowed me to grow and learn. My experience within each of these organizations has been that, for the most part, everyone respects others' opinions and we at least agree to disagree. One of the best forums for presenting ideas within MASE is this newsletter.

Okay, enough dancing, I'll come back to my point. The State of Maine Subsurface Wastewater Disposal Rules have always had some design constraints within them which are not scientifically based. Thus, I am certain that you would not be surprised to know that I am opposed to this type of regulation. I realize that we don't have scientific data to stand behind every setback, depth requirement, or sizing standard. However, the closer we can come to regulating septic systems based upon science the better off we will all be. Then, when we require additional money to be spent for the permitting and installation of a septic system we will have the data necessary to support our need to protect the public from impacts that septic systems can have. The one thing that sometimes gets lost in the discussion is that the owners of each of the systems we design pay a price for each additional regulation we add to our designs. Therefore, I can see no good reason to make them pay more unless we are certain that there is a scientifically-based reason to do so.

One proposed change to the rules is the *Key for Determining Depth to the Seasonal Groundwater Table* which is contained within Chapter 4, titled: Design Criteria. I concur with the need for the key itself, but disagree with the lack of information that is provided with certain terms. Soil scientists in the northeast have had morphological criteria for identifying the evidence of seasonal high water tables near the soil surface for about 20 years now. These standards are based on experimental observation, have been peer reviewed, written about in journals, and subsequently discussed at length at many regulatory, and professional society meetings. A version of these standards have adopted by at least three regional organizations. So, the fact that the proposed subsurface rules reflect some of these changes comes as no surprise to me. However, there are some phrases that are with *the Key to Determining Depth to the Seasonal High Ground Water Table* which are not, to my knowledge, in any other keys similar to this. Examples of this are the terms: "differential organic matter accumulation", "cold



Continued on next page

temperatures”, “higher elevations”, “northern part of the state” and “Downeast coastal areas”. I may understand the concepts that are being described. However, nowhere in the Rules are these terms defined even conceptually. Therefore, I believe that site evaluators will have a difficult time knowing when to apply these concepts for determining seasonal high water tables and, if legally challenged, even more difficulty defending themselves. Similarly, those reviewing and approving site evaluator’s designs will not have clearly defined guidelines on how or when to apply these concepts so consistency is apt to become an issue.

I make my living working along the coast and have done a lot of work up north and in the mountains so I’m no stranger to the difficulties of identifying seasonal high water tables in these areas. I also realize that we do not have the scientific data that outlines the parameters for many of the concepts that are listed. Look, all I’m asking for is something someone can repeatably measure at least conceptually (science based justification for the rule) as opposed to not having any specific definitions for terms called for in the Rules. So, what are the morphological criteria for “differential organic matter accumulation” and what are “cold temperatures”, and what is considered the “northern part of the state” and “Downeast coastal areas”? It seems to me that it would not be that difficult to provide parameters for these concepts if they are important enough to be contained within the Rules. In addition, it is obvious to me that these terms do not conform to some existing standard that has been established by scientists or they would have already been referred to.

I don’t have specific answers for these questions at this point and it appears that no one else does either. So, I can’t endorse these concepts until I know what they mean. Okay, I’ve got my farm clothes on now, go ahead and throw the tomatoes if it will make you feel better!

A Look Back at Septic System Designers

by Allen Ott, LSE #S187, CSS #185

As some may know, I’ve been out of action for the past few years. I’ll spare you the medical details as there have been several reasons why I’m not currently in the field digging test holes, but I’ve kept my licenses current (SE #187 from 1982, & Soil Scientist #185 from 1986.) I’m grateful that MASE, MAPSS, and the other professional environmental organizations in the state of Maine are strong and growing.



I was in the “transition” class when I started under Ralph S. Baker (SE #98). There were still remnants of those who had conducted “perk” tests before the Code changed in the mid-70’s to require actual site evaluations. It took a while for the Federal government to notice the changing standards. Ralph and I had to do research in the old, purple EPA manual (that will certainly date me!), when Acadia National Park hired Ralph to identify suitable soils for the Jordan Pond House after it was burned down in the early ‘80’s. How I remember setting up a water supply, digging the test holes, laying the gravel in the bottom of them, then pouring water and measuring it’s rate of drop. I think of it every time I see

the site (in the little field across from the entrance to the Pond House main parking lot driveway.) I also recall it was a LONG day!

Ralph also was keen on pressure distribution systems at their inception in Maine. He actually paid me for designing a program in BASIC on my Tandy Color Computer (CoCo 16K?!) to do the calculations for the pipe and hole sizing. We really thought we were hot stuff back then! Most people today can probably do the same kind of operation on their iPhone4 while they’re sitting in traffic!

I offer the above not to wallow in the past, but to let all you know that today’s Site Evaluators have a rich heritage be proud of. Ask the older MASE members at the next meeting what it was like doing this profession in the late ‘70’s, the 80’s, and the early ‘90’s. You have a gold mine of information and experience available to you that will help you do your profession even better!



What the Heck is the GeoLibrary?

It's Where Google Gets Its Maine Imagery!

By Gretchen Heldmann, GIS/IT Specialist for the Town of Hampden

On April 9, 2002 the Governor signed into law L.D. 2116 “An Act to Establish the Maine Library of Geographic Information (Chapter 649)). The Maine Library of Geographic Information (“the GeoLibrary”) is a partnership of public and private stakeholders from many sectors, some of which include state, county, and local government, academia, non-profits, and private industry.

The GeoLibrary Board has provided many services to the Maine GIS community and general public since 2003. One of these services is collecting imagery. The GeoLibrary works to create, collect, and catalog free, publicly available geographic data that companies such as Google and Microsoft mine and use in their software. These data are distributed freely to promote the greatest use, reuse, and development of innovative services that can benefit the people of Maine.

The *mission* of the GeoLibrary is to create an electronic gateway to public geographic information, and to expand and promote the value of geographic spatial data through widespread distribution and innovative use for the benefit of Maine’s citizens.

The *vision* of the GeoLibrary is to provide state-of-the-art, comprehensive, and ever expanding access to public geospatial information and services, and to facilitate the availability of geographic information collections and access for all citizens. This vision encompasses a variety of goals, including:

- establishing an online portal for all public geographic data in Maine whether it comes from government, academia, non-profits, or the private sector,
- facilitating the modernization and consistent GIS development of local government land records by establishing standards that make local data more accessible and useful for businesses and citizens of Maine,
- support for planning and growth management with datasets and techniques that enable state/county/municipal governments to effectively plan land use, location decisions, and site designs in a way that will minimize negative impacts on the social, economic and environmental health of Maine,
- multi-organizational data-sharing that results in significant savings in the cost of creating and maintaining geospatial data,
- promoting innovative uses of public geospatial information that fosters economic development,
- budgeting that prioritizes the strategic importance of geospatial information, its maintenance and dissemination, and
- implementing education and outreach programs for teachers, students, Maine citizens, and more.

What has the GeoLibrary accomplished?

At present, all members of the GeoLibrary Board serve pro bono. The GeoLibrary has no staff or operating budget. The State Office of Information Technology (OIT) provides administrative and operational support.

The GeoLibrary received bond funds totaling \$2.3 million in 2003 to start its work. With that money, they:

- Collected Aerial Imagery for State and Local Government & the Public: Implemented from 2003-2008, a \$3.2M project, 50% matched by USGS, to produce high resolution digital orthoimagery (aerial photography referenced to Earth coordinates) for 561 the state's organized townships. The imagery is available to search and download through the Maine GIS Data Catalog, or for viewing through the state's aerial imagery viewer – or by opening Google Earth, because Google (and other companies) actually gets its free public imagery for Maine through the GeoLibrary.
- Provided Select Towns With Digital Parcel Data: Completed a \$370,000 municipal grant program for digitizing property tax maps with awards varying from \$1,000 to \$10,000. A total of 114 applications were received and 75 were awarded grants. The parcel grants program was one of the GeoLibrary's most popular programs. GeoLibrary members frequently receive inquiries from municipalities about future funding for grants for digital parcel data. A number of Maine municipalities who were contemplating setting up their own GIS systems reported that receiving a GeoLibrary grant to help automate their parcel data was exactly the "kick start" needed to proceed with their own investment.
- Created An Online Data Portal For More Than Just State Data: Completed the initial construction of its web-based GeoPortal for public access to statewide spatial data. The GeoPortal is now operational in prototype mode and can be accessed from the GeoLibrary website at <http://geolibportal.usm.maine.edu/geonetwork>. The GeoPortal currently contains records and links to state agency datasets. The GeoLibrary Board is working on adding other available datasets from local and county government, academia, non-profits, and the private sector.
- Updated The GeoLibrary's "Comprehensive Plan": Provided \$15,000 in direct funding to help win a federal National Spatial Data Infrastructure grant of \$50,000. This grant had two objectives; first, to update and enhance the GeoLibrary Strategic Plan (basically a Comprehensive Plan for the GeoLibrary Board to guide their direction and focus for the next 5-10 years) and second, to recommend a conceptual framework and functional specification for an Integrated Land Records Information System for the State. Such a system would allow for integration of geographic data related to parcels throughout the state, whether it be from local, county, or state governments or even private industry.
- Celebrated GIS Day (Education & Outreach): Sponsored exhibits and demonstrations for GIS Day (11/19/08) in the Capitol Hall of Flags. The theme for the day was *Harnessing the Power of GIS to Benefit the Citizens of Maine* and in particular showcased the contributions of the GeoLibrary to municipalities and the public. Five towns and two schools were represented as well as the United States Geological Survey, Maine State Planning Office, Maine GIS User Group, Maine Department of Transportation, Northern Maine Development Commission and the GeoLibrary Board itself.
- Collaborated with the Maine Office of GIS, Maine GIS User Group (MEGUG), and the state agency GIS Stakeholders Group to ensure cooperation and encourage efficiencies regarding mutual goals. This effort has included creating a single, simple forum for communication – The Maine GeoNews. This electronic mailing list will be the single conduit for information on MEGUG events, GIS news, training announcements, grant opportunities, new and updated geospatial data, and employment opportunities in Maine.

Stay tuned for future articles on GeoLibrary products, information on how the GeoLibrary can help your organization, and how your organization could help the GeoLibrary! Visit us online at <http://www.maine.gov/geolib/>

University of Maine Engineers Without Borders (EWB-UM)



Dulce Vivir de Copan, Honduras project



Who we are

Engineers Without Borders - University of Maine Chapter (EWB-UM) is a student organization which strives to improve quality of life in developing communities through the implementation of sustainable and community-driven engineering projects. Our members are students from various engineering and other disciplines, and we all work together to find the best solutions while developing our professional and leadership skills.

Our Partner Community

The community of Dulce Vivir is located on the outskirts of Dulce Nombre de Copan in western Honduras. The roughly 100 residents suffer from illness as a result of poor sanitation and limited access to safe water. Dengue fever, diarrhea and other illnesses are a constant problem for the community.

Sanitation facilities in Dulce Vivir consist of a pour-flush latrine behind each house that empties into a cesspit. A combination of high water table, impermeable soil and flooding during the rainy season causes the cesspits to overflow, exposing the residents directly to human waste.

On our first visit to the community, EWB-UM drafted a drainage plan to divert stormwater runoff around the community which has improved the situation, but a more permanent and effective solution was needed.



The Project

After presenting five options that could be implemented to handle the wastewater, a septic system with raised mound leach field was chosen as the best treatment and disposal option. Travel teams have collected site data needed for the design of the system, as well as health and census information. Several student teams have worked on different elements of the design. A preliminary design of the collection system, septic tanks and leach field was done, then more detailed designs of each component were developed. Now a dedicated few are working with professional mentors to complete the detailed designs and construction plans.

We have a trip scheduled for the end of August 2010 to do some final soil testing, observe conditions in the rainy season, and mark the system component locations so the community can begin trenching when the dry season comes. Construction of the project will take place in March of 2011.

Join Us!

We invite you to participate in our project. There are many ways to become involved. The cost to construct this project is \$32,800, so donations are very welcome. We are also always looking for people to serve as mentors, share skills, provide technical reviews or translations and much more. Please visit our web site at [web site at http://www2.umaine.edu/EWB](http://www2.umaine.edu/EWB), or contact our president at president.ewb.um@gmail.com to learn more.

Albert Frick of Albert Frick Associates and other Maine consultants are mentoring students who are participating in this project. The students not only have the opportunity to be part of the planning, design, and construction of an actual project, but the experience presents them with the unique challenges of working in an unfamiliar environment, maintaining good communication despite cultural and economic barriers, and finally the ultimate reward of improving the lives of their clients.



MAINE ASSOCIATION OF SITE EVALUATORS

TREASURER'S REPORT

July 1, 2010

Cash on Hand as of 06/01/10 \$ 11,443.01

Income

Membership Dues \$ 95.00

Golf Tournament \$ 554.00

Hat \$ 5.00

Expenses

Golf Tournament \$ 973.25

Period of 6/01/10-6/30/10 Total Income: \$ 654.00

Total Expenses: \$ 973.25

Cash on Hand as of 06/30/10 \$ 11,132.76

Fidelity Mutual Fund Balance as of 06/30/10 \$ 8,915.64

(- \$765.20 from 05/01/10)

Total Assets as of 6/30/10 \$ 20,0039.40

20th Annual MASE Golf Tournament

by Dave Kamila

MASE held its 20th Anniversary Golf Tournament on June 26th at the Meadows Golf Course in Litchfield. Unlike last year, we had a beautiful sunny day for our 20th anniversary and appropriately 20 golfers showed up. The course was in terrific shape thanks to Ron Bearnard and his dedicated crew. Everyone enjoyed a great round of golf and a fantastic lunch as always compliments of Blake Johnston and Infiltrator Systems. The Meadows also surprised us with a delicious cake to commemorate the occasion.

In recognition of our 20th anniversary, the MASE Executive Board was very generous in providing gift certificates to Applebees for all the winners this year. The winning team of Mark Hampton, Kathy-Rae Emmi, Dick Sweet, and Dave Kamila came in at 6 under par. Second place honors went to Chris Jameson, Dave Moyse, Dick Babine and Earl Rafuse at even par.

Closest to the pin winners were: #3- Dave Kamila 8'-5" and Andy Pierce 12'-6"; #7- was a tough hole; nobody landed one on the green; #15-Kathy-Rae Emmi 16'-8" and Dave Kamila 21'-9"; #17-Rod Kelshaw 3'-6" and Kathy-Rae 5'-2".

This year's Longest Drive honors went to who else but Dave Kamila and Kathy-Rae Emmi. Now Kathy is a really good golfer, but me, not so much. So, I'm putting down the challenge to folks for next year to give Kathy and me some competition.

I also want to say a special thanks to Bruce Johnson and Gary Fullerton who helped make all the arrangements to make this event possible. I look forward to seeing you all again next year.



MASE TECHNICAL REVIEW COMMITTEE: A VASTLY IMPROVED SET OF SUBSURFACE WASTEWATER DISPOSAL RULES IS ON THE WAY

by Ken Stratton, MASE Past President, MASE Stakeholder Representative

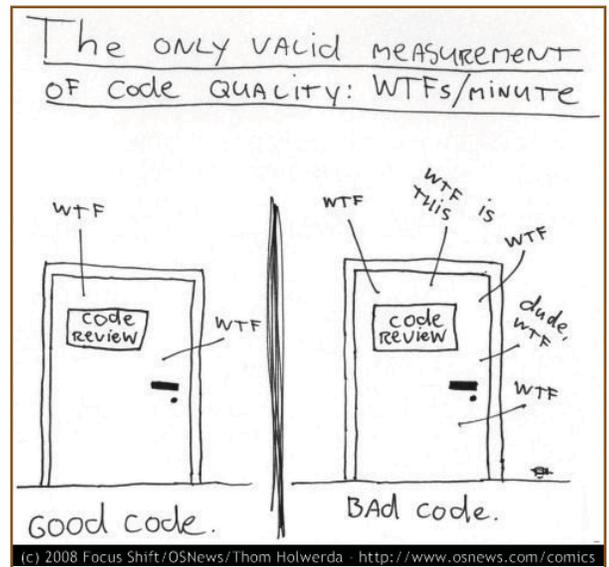
Most of you will remember that about 9 months ago, the MASE Board of Directors voted to re-activate the Technical Review Committee (TRC), the main focus of which was to work with the Division of Environmental Health (DEH) and “fix” some of the sections of the subsurface wastewater rules that are the most troublesome to both Site Evaluators and DEH. Well, the fix grew from just addressing a few sections to re-doing the entire set of rules, including reorganization of the material in various chapters, and applying a new numbering system to the entire document. We all wanted a better set of rules and a more user friendly document. A huge undertaking!

On MASE’s part, we established a diverse, very experienced, and certainly hard working group to serve on the TRC. DEH established a Stakeholder’s group to get input from other interest groups and organizations. The MASE TRC is chaired by Al Frick and members include Dick Babine, Darryl Brown, Gary Fullerton, Dale Knapp, Dave Marceau, Dave Moyse, Bill Noble, Earle Rafuse, Doug Riley, Dave Rocque, Clough Toppan, and myself. I also served as the MASE representative to the DEH Stakeholder Group, as did Dave Rocque on behalf of the Maine Department of Agriculture. These people deserve your thanks for the many, long hours they contributed to the effort. And, I have to say, the task was made much easier because of the close working relationship we had with Dave Braley and Doug Coombs of DEH.

Now, here’s where the process stands. A draft set of rules is now being reviewed by the Attorney General’s office. That review does not focus on the technical content, but rather, it ensures that the provisions of the rules fall within the legal or statutory mandates of the DHHS. Once the AG’s office completes its review, a date for the public hearing will be set. It now looks like the date will be around mid-September. Also, once the hearing date is set, you will be able to obtain a copy of the draft rules from DEH. After the public hearing, there will be a public comment period followed by DEH’s decision on the specific content of the document. Adoption of a final set of rules - probably late fall. While the MASE Board is yet to put together a program for the annual meeting, I suspect that it will include a lot of training on this new code.

It’s obviously difficult to predict the exact changes that you will see in the new rules, beyond the reorganization. But, with the positive reception we have received to our recommendations, you can look for changes in involving wetlands, waterbodies/courses, data gathered during the site evaluation, fill sites, references to systems put in before 1974, design flows, a revised drainage key, revisions to the tables, new setback values, wells and well setbacks, replacement systems, and a new flow chart to guide the site evaluator to the proper design criteria. There are many more - too numerous to detail in this report.

Finally, as we get closer to the public hearing, the TRC will send out information and suggestions for testimony at the public hearing. The TRC has worked hard to be in the position of offering MASE’s support of the new rules at the hearing. I’m sure we will still have some recommendations for changes, but they will be few compared to what we faced at the beginning of this process. Please know that the TRC tried very hard to eliminate as many land use control type of issues as we could. However, the reality is: it ain’t gonna happen just yet. The TRC, in its future work, should continue to push for more changes.



REMINDER

MAPSS/MAWS/MASE/SSSNNE/MFS WORKSHOP SADDLEBACK SKI LODGE SEPTEMBER 1, 2010

This is a reminder that the Maine Association of Professional Soil Scientists, in cooperation with the Maine Association of Wetland Scientists, Maine Association of Site Evaluators, Soil Science Society of Northern New England and the Maine Forest Service will be offering a workshop on Saddleback Mountain near Rangeley, Maine on September 1, 2010. **The focus of this workshop will be on the unique soils and hydrology features frequently encountered when undertaking construction in the higher elevation areas of the state, particularly the western Maine mountains.** Participants will visit 5 sites during the morning of the workshop where they will have the opportunity to observe unique hydrological features and evaluate 17 soil pits in different positions in the landscape. Some of the soil pits have large contributing watersheds with oxygen rich groundwater flowing through them. Thanks to the generosity of staff at Saddleback ski lodge, the water table in these soil pits has been monitored 2 times per week during the growing season in 2009 and 2010. Unique hydrological features include boulder fields where there is standing or moving water between the boulders but non-hydrophytes grow in the organic duff on top of the boulders and stone lined subsurface channels that have running water in them. One can stand on top of these stone lined channels and hear the running water but you can only see the water in a few areas. They function similar to an seasonal underground stream.

One of the outcomes of this workshop is to have a determination of the classification of these unique hydrological features by state and federal regulators. In order to provide that determination, the Army Corps of Engineers is sending a problem solving team based in their Cold Regions Lab in Hanover, New Hampshire, to the sites this July. Participants will be provided with a detailed soil description taken by a team including NRCS, the State Soil Scientist, the State Site Evaluator and private sector soil scientists. The workshop will conclude at the lodge with an afternoon power point presentation and discussion of each site, moderated by the State Soil Scientist, which will include state and federal regulators.

This workshop should have broad appeal to many groups and individuals, particularly anyone with an interest in the booming mountain top windfarm development including engineers, soil scientists, wetland scientists, code enforcement officers, planners, town managers, environmental organizations, site evaluators, developers, loggers, foresters and contractors.

Foresters and loggers should attend to learn about these unique hydrological features and soils as they affect many aspects of their professions from site productivity to skid trail and logging road construction.

Wetland scientists and soil scientists and site evaluators should attend to learn about hydrologic features they need to identify in the field when collecting data for a development project and describing high elevation (but not Cryic) soils.

Continued on next page

Engineers should attend to understand what these hydrologic features are so they can design appropriate measures for windfarm and development infrastructure without significantly altering the natural hydrology. Development projects in high elevation areas must take these features into consideration when submitting a project for a permit to a State Regulatory agency.

State regulatory agency personnel, code enforcement officers, town managers and environmental groups should attend to familiarize themselves with the unique soils and hydrology features that development projects in the higher elevation areas must contend with.

Individuals from neighboring New England States should be interested in this workshop as they have similar hydrologic features and soils to contend with concerning windfarm and ski resort development in their mountainous regions.

Register now for what should be an interesting, informative and enjoyable day in one of the most beautiful locations in the state of Maine. September is a great time to visit the western Maine Mountains. The bugs have disappeared as have many of the tourists, the weather is dry and cool and the foliage is just starting to turn on the mountain tops. For those interested in spending a night or two in the area, Saddleback has condo's to rent.

If you have any questions, contact David Rocque at (207) 287-2666 or e-mail at David.Rocque@Maine.gov. See next page for registration form.



2010 COOL CLIMATE SOIL, HYDROLOGY AND SITE EVALUATOR SOIL PIT CLASSIFICATION WORKSHOP

Wednesday, September 1, 2010

The 2010 MAPSS/MAWS/MASE/MFS/SSSNNE Cool Climate Soil, Hydrology and Site Evaluator Soil Pit Classification Workshop will be held at the Saddleback Ski Lodge property in Dallas and Sandy River Plantations; on September 1, 2010 from 9:00 am until 3:30 pm. Check-in will be in the base lodge from 8:30 am to 9:00 am. You will be given a location map to sites you are to visit along with a few other handouts including a Check List for Identifying Soils with Oxyaquic (oxygen rich) Conditions in the Upper Part and a Key for Identifying the Seasonal Groundwater Table for Site Evaluators. Assistants will be at each of the sites to point out the soil pits and other areas where you are to make observations (and determinations). You have from 9:00 am – 12:30 pm to visit the sites. After visiting the field sites, travel back to the base lodge for a 1:00 pm – 3:30 pm discussion of the sites and soils by state and federal regulators. **Lunch is on your own but there is a cafeteria at the base lodge where you can get sandwiches, drinks and snacks.** You will see soil pits in a variety of positions in the landscape including on long sloping sites where you will need to make a determination as to whether or not they have oxyaquic conditions, groundwater seeps, stone-filled subsurface channels, boulder fields that have upland tree species growing in the organic duff layer on top of the boulders but where water stands or flows between the boulders. Your task is to decide whether you believe these unique areas are protected natural resources or not and then hear what the regulators have to say about them. See attached workshop description for more details.

The cost of the workshop is \$25.00 for MAPSS/MAWS/MASE/MFS/SSSNNE members or associate members and **\$40.00 for all others.**

Check here if you are not a MAPSS member and you want the \$15.00 additional registration fee to be used for an associate membership in MAPSS.

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

For planning purposes, we ask that you register by August 25. Check www.mapss.org for background information and updates. Continuing education credits will be awarded as follows: 2.0 CEU's to New Hampshire Certified Wetland and Soil Scientists, 6.0 PDH's to Maine Licensed Site Evaluators, 6.5 Category 1 CFE's to Foresters and 6.0 Credits to Maine CEO/LPI Recertification

Registration for MAPSS/MAWS/MASE/MFS/SSSNNE 2010 Cool Climate Soil, Hydrology and Site Evaluator Soil Pit Classification Workshop
Saddleback Ski Lodge Property, Dallas and Sandy River Plantation

Name(s): _____

Address: _____

Phone Number: _____ E-mail: _____

Number Attending Workshop: _____ X \$25.00 = _____

_____ X \$40.00 = _____ **Total:** _____

Pizza and Tall Tales...

6pm, Tuesday, August 31, 2010

The Red Onion and Rangeley Lakes State Park

WHO: MAPSS, MAWS, MASE members, partners, spouses, children

WHAT: socializing and story telling the evening before the Saddleback workshop

WHERE:

DINNER: 6pm, The Red Onion
Main Street, downtown Rangeley
Menu and directions on-line: <http://rangeleyredonion.com/>

CAMPING: Rangeley Lakes State Park
South Shore Drive, Rangeley
** reservations required, contact Johanna Szillery **

WHY: because what we really enjoy about these workshops is visiting with each other!

CAMPING INFORMATION:

MAPSS (c/o Johanna Szillery) has reserved the “west end” group campsite for August 31, 2010. The Park is on the shore of Rangeley Lake and includes a swimming area and hiking trails. The group campsite has available room for approximately 40 people (overflow areas may be available). Parking and restrooms are nearby; there are shower facilities in the Park. Camping fee is \$5 per person.

More information on Rangeley Lakes State Park, amenities and attractions at:

http://www.maine.gov/cgi-bin/online/doc/parksearch/search_name.pl?state_park=25&historic_site=&public_reserved_land=&shared_use_trails=&option=search

OTHER LODGING:

For those who are not campers, Saddleback has offered workshop attendees a special rate of \$75.00 per person based on double occupancy at the mountainside condominiums. For more information about the condos please visit their web site at www.saddlebackmaine.com. There are also other lodging options in the area. Check out Rangeley area on-line.

Please note that dinner and lodging are at your own expense.

Please reserve a spot with Johanna for the group campsite, or contact Johanna with other questions.

jszillery@swcoale.com

207 848 5174 (work)

207 827 4172 (home)

Subsurface Wastewater Disposal Training Center Construction Completed

By Richard Green, LSE #195

The cloudless sky had dawned a brilliant blue and the summer sun was already burning through the mist shrouded hay field at 254 Alexander Reed Road in Richmond when the MASE crew assembled on the morning of August 17, 2010 to start construction of the new subsurface wastewater disposal training center. The endless green sea of lush grass that covered the back forty of the Maine Rural Water Association's (MRWA) new office building was strewn with piles of crushed stone, backfill of varying quality, proprietary devices, and miscellaneous pieces and parts ready to be installed, in accordance with the Maine Subsurface Wastewater Disposal Rules and the manufacturer's instructions, into real world disposal system models demonstrating a wide array of technologies and construction techniques both good and bad.



The training center was conceived by the MASE Executive Board and Education Committee and developed in cooperation with MRWA, an organization that assists rural communities with financing and operation of water and wastewater facilities. The first day's work crew consisted of Doug Coombs, state Site Evaluator, who designed the layout of the facility, and Brent Lawson, state Plumbing Inspector, from the Maine Department of Health and Human Services; Mike Deyling of Summit Environmental Consultants who provided the excavator and skid steer loader; Sean McGuigan from Presby Environmental, Inc.; and Richard Green, from Green Environmental. On the second day Gary Fullerton of Sebago Technics, Inc. replaced Sean.

Construction conditions were perfect for the large, flat site. The soil consisted of a beautiful layer of silt loam topsoil overlying firm silty clay loam which had the consistency of brick due to the dry conditions. The soil was classified according to the current Rules as a 9-D1, requiring an extra-large disposal area. For the purposes of the training models, soil conditions were disregarded in the design of the disposal areas.

During the two days of construction the crew installed a stone and pipe disposal bed, concrete chambers, plastic chambers, Eljen Indrains, Enviroseptic/ADS tubes, a standard 1000 gallon concrete septic tank, and a monolithic tank with integrated pump station. All the installations will be dry, so they will not be put to the test by running wastewater through them. Various levels of site preparation and backfill qualities were used to demonstrate acceptable and non-compliant installations.



Continued on next page

After two intense days of digging, scarifying, mixing, and placing, the the crew celebrated a job well done with cheers and handshakes. Their work produced five different types of disposal areas. One side of each disposal area was left uncovered, allowing access to secrets normally hidden beneath the sometimes deceptively attractive smoothly graded surfaces. The first training sessions are slated for October. Thanks to volunteer efforts and donations, the training center was constructed at very little cost to MASE, and will be a valuable training tool for years to come.



**MASE Annual Meeting Minutes
February 23, 2010
Millenium Convention Center
Palmyra, ME**

Ken Stratton, 2009 President, presided over the meeting.

Minutes of 2009 Meeting

Ken read excerpts from last year's meeting minutes. Moved and seconded to approve, **Passed**

Treasurer's Report and Budget

Bill O'Connor, Treasurer, presented the 2009 financial report. It was moved and seconded to approve the Treasurer's Report, **Passed**.

It was moved and seconded to donate \$1000 to the Envirothon. **Passed**.

It was moved and seconded to donate \$1000 to the UMO soil judging team. **Passed**.

Upcoming Dates

The dates of the upcoming site evaluator exam and field day were presented. They are included in the Feb, 2010 MASE Newsletter. The field exam site has not yet been selected.

Dave Rocque spoke about the upcoming MAPSS/MASE training on Sept 1, 2010 at Saddleback. This is the last session he will be doing the site selection and preparation.

Election

The Slate of Officers for 2010 was presented:

President:	Gary Fullerton
Vice-President	Dale Knapp
Treasurer:	Amy Jones
Secretary:	Richard Green
Immediate Past President	Ken Stratton
Director:	William O'Connor
Director:	Bill Noble
Director:	Stephen Marcotte

Moved and seconded to accept the slate as presented. **Passed**.

A \$100 LL Bean Gift Certificate was presented to Ken as appreciation for his efforts.

There was much discussion about increasing the amount of the gift to the outgoing president and stipend for board members. Several motions were made and withdrawn. It was ultimately decided that the board will come up with a plan to help offset board member expenses and present it to the membership for action.

Dave Marceau, Education Committee Report

MASE recognized and thanked Wayne Berzinis of Construction Consultants for the donation for education/training. The grant greatly helps our efforts in continuing education of Site Evaluators.

MASE Annual Meeting Minutes February 23, 2010 continued

We have a commitment of \$3000 per year for five years from Eljen and Construction Consultants. This has already been used to improve the field day training session and more training opportunities will be explored. Maine Rural Water, and Unity College have offered land for research and training projects. Experts and trainers will receive some payment at future sessions.

Dale Knapp, Wetland Scientists

Wetland Certification will not pass at this time in the legislature. There will be a meeting with the MDEP and a final hearing with the Business, Research, and Economic Development Committee. Certification may end up taking on a new form outside of the BRED.

Russ Martin, Stakeholders Group on Rule Changes

Audio tapes are available of the meetings. The stakeholders group should pay close attention to make sure that undesirable changes are not made during the current revamping of the rules.

Other Meeting Topics

There was support expressed for providing a scholarship to students to learn site evaluation skills. It was also suggested that contractor training would be beneficial to site evaluators.

Gary asked if the organization should expand to include installers or contractor training. This will be looked into by the board. Mark Cenci commented that the NH organization includes installers as well as designers.

Meeting adjourned 3:55 pm.



MASE News

Annual Business Meeting and Technical Seminar - The MASE annual meeting is tentatively scheduled for Tuesday, March 1, 2011 at the Millennium Convention Center in Palmyra. The exact date and location are still subject to change. MASE is looking for ideas for speakers and discussion topics for the meeting. Please contact President Gary Fullerton or any MASE board member with your ideas.

Proposed Changes to the Maine Subsurface Wastewater Disposal Rules, Chapter 241 - The Division of Environmental Health is proposing revisions to the Subsurface Wastewater Disposal Rules (C.M.R. 241). The purposes of these revisions are to correct errors and inaccuracies, to create a more user-friendly document, and to reflect the Department's statutory responsibilities more plainly. The MASE Technical Review Committee is one of the stakeholder groups involved in the revisions.

Training Opportunities - MASE members will have several opportunities to receive training on soil interpretation and site evaluation and septic system design principals. On Wednesday, September 1, MAPSS will conduct their annual training with a session on cold climate and high terrain soils held at Saddleback. Details and registration information can be found inside the newsletter, including details on group camping at the nearby state park. On September 30 MASE/MAPSS will hold its annual field test pit training in southern Maine. See details at the bottom of this page. In October the new MRWA/MASE subsurface wastewater disposal training center will open in Richmond. Several one day training sessions are planned. MASE is seeking qualified experts to assist with this training. A stipend of \$100 per day will be paid for this service. For more details see the article in the newsletter, or contact David Marceau, Chairman of the Education and Training Committee.

Changes in the Overboard Discharge Law - 38 MRSA §411-A, An Act To Improve Water Quality through the Phaseout of Overboard Discharges and the Improvement of the Boat Pump-out Laws has been amended, mandating the removal of OBD's in certain cases. Contact the Maine Department of Environmental Protection for more information on the new requirements.

2010 MASE/MAPSS Field Day

- **Date: September 30, 2010**
- **Location: Southern Maine, TBA**
- **Cost: \$25, includes lunch**
- **Onsite Soil Experts, Group Discussion**
- **6 PDH Training Certificate**

MASE Calendar

Meetings, trainings, and other events of interest to MASE Members

September 1, 2010	MAPSS/MASE Saddleback Soil Workshop, Rangeley, ME.
September 8, 2010	MASE Board Meeting, Augusta 3:00 p.m.
September 29, 2010	Site Evaluator Field Exam.
September 30, 2010	MAPSS/MASE Annual Field Day.
October 13 2010	MASE Board Meeting, Augusta 3:00 p.m.
October 13-20, 2010	MASE/MRWA Training Center Seminars
December 7-8, 2010	MRWA Annual Meeting & Technical Conference, Freeport.
December 8, 2010	MASE Board Meeting, Augusta 3:00 p.m.
January 12, 2011	MASE Board Meeting, Augusta 3:00 p.m.
March, 2011	MASE Annual Meeting and Technical Seminar (Tentative date).



MASE
MAINE ASSOCIATION OF SITE EVALUATORS
WWW.MAINESE.COM INFO@MAINESE.COM

c/o Gary Fullerton, President
104 Millturn Road
Limington, ME 04049

MASE Newsletter
AUGUST 2010