

A detailed cross-section of soil layers. At the top, there is a layer of dark brown topsoil with plant roots extending downwards. Below this is a layer of reddish-brown soil, followed by a layer of light brown soil, and then a layer of tan soil. At the bottom, there is a layer of dark brown soil and a layer of greyish-brown soil. Large, smooth, greyish-blue rocks are scattered throughout the lower layers.

**Massachusetts Title 5
Soil Evaluator Certification
WHAT TO EXPECT AT CLASS**



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The Soil Evaluator Class is developed and delivered through a collaborative effort between UMass, MassDEP, and NEIWPC.

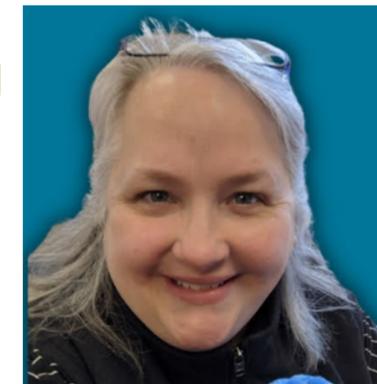


Claire Golden

Sean Carney



This cross-agency planning team ensures the course content is technically sound, up-to-date with current regulations, and grounded in both research and real-world field conditions.



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Classroom

The Soil Evaluator Class begins in the classroom, where you'll meet your instructors and get to know the other students in the room. Classes typically include about 45 participants comprised of Boards of Health, engineers, health officers, sanitarians, etc. and are led by a knowledgeable and supportive team of instructors and presenters from MassDEP, UMass, and NEIWPC.



Day One is all about building a strong foundation. We'll walk through the Title 5 regulations, review onsite septic system basics, and introduce the fundamentals of soil evaluation. You'll also learn about the geology of Massachusetts. The soil science portion covers things like soil color, texture, horizons and layers, structure, and consistence. We'll also talk through how to identify high groundwater and recognize redoximorphic features, with plenty of explanation along the way.





Day Two shifts into a more hands-on mode. We'll start by reviewing the MassDEP's soil app, including how to navigate it and use the reference links you'll rely on during an evaluation. From there, instructors will guide you step-by-step through Form 11. In the afternoon, you'll get the chance to work directly with soil monoliths and handle different soil types. Be sure to bring a laptop to access reference materials and a towel to clean your hands after working with the soils.

Day Three brings everything together and gets you ready for the field portion of the class. We'll cover field methodologies in detail, review some of the finer points of completing Form 11, and give you a chance to practice using the reference links. Instructors will also explain how Frimpter is used to estimate high groundwater. There will be plenty of time for questions and review. This day is designed to help you feel confident and prepared for the written exam.

The class concludes with a written, closed-book, multiple-choice exam. The exam includes 60 questions covering the material discussed throughout the course. You'll want to review the Title 5 regulations and the soil manual that are sent to you before class. A score of 70% (42 correct answers) is required to pass, and the course is structured to give you the tools you need to succeed.





Study Materials for Exam

310 CMR 15.000: Septic Systems ("Title 5")

Soil Evaluator Class Manual

Notes from Class Presentations

Nothing on the exam is a surprise. All questions come directly from the Title 5 Regulations, the class manual, and the material covered in class. Taking time to review your notes will set you up for success.

Equipment

The field portion of the class is hands-on and takes place outdoors, so being comfortable and prepared will make the experience much more enjoyable. Most items are simple, practical tools you may already have.

Sunblock

- Field days are spent outside for several hours. Sun protection is strongly recommended.

Insect repellent and lint roller

- Ticks, bugs, and plant debris are common in field settings. A lint roller is an easy way to check clothing during the day.

Soil Color Book (Munsell Soil Color Book #M50215B or GLOBE #GEO801)

- Used to determine soil color, which is an important part of soil classification and identifying redoximorphic features.

Tape measure

- Helps measure soil horizons, depths, and other features observed in the test pits.

Trowel, knife, or small garden shovel

- Used to clean up soil faces and examine soil structure more closely.

Soil sample tray

- A surface to place and examine soil samples. A plastic plate or muffin tin works perfectly—no special equipment required.





Spray water bottle

- Lightly moistening soil makes color, texture, and structure easier to see.

Small towel

- Handy for wiping soil from your hands and tools throughout the day.

Clipboard

- Keeps your Form 11 and other paperwork secure and easy to write on while in the field.

Soil field guide

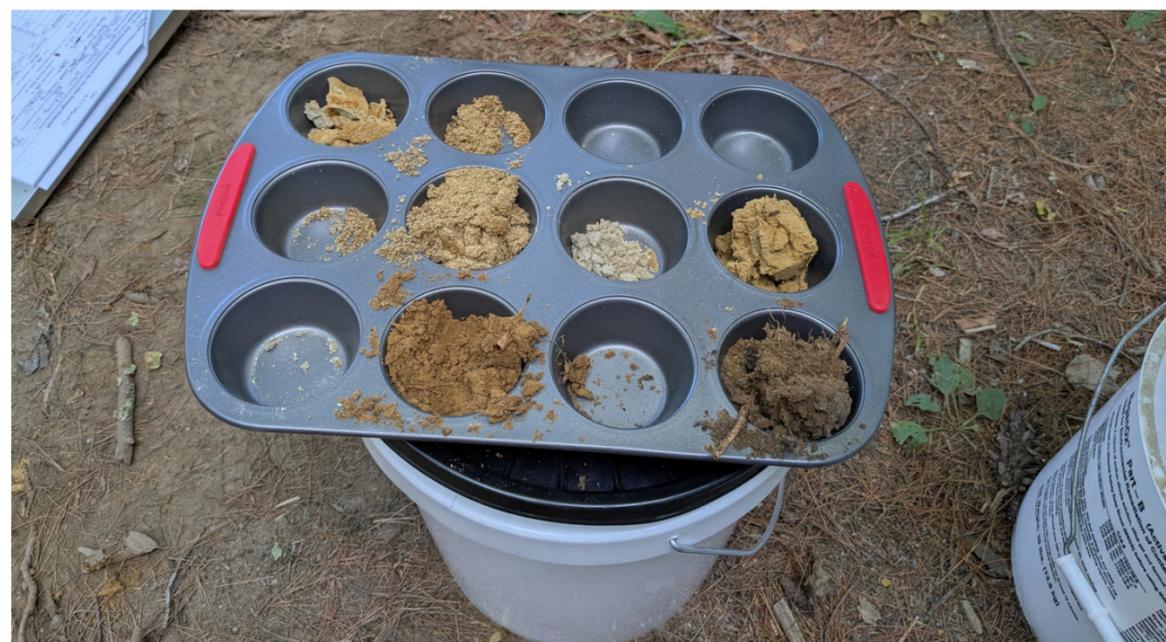
- A small reference booklet that will be provided during one of the classroom sessions and used in the field.

Proper field clothing

- Dress for outdoor conditions, including rain gear if needed, and wear sturdy work boots. Expect uneven ground and changing weather.

5-gallon bucket with lid

- Optional but very useful. You can store your supplies in the bucket and use it as a seat while working in the field.



In the Field

The field portion of the Soil Evaluator Class takes place over three days, plus a separate field exam day, and is designed to give you hands-on experience applying what you learned in the classroom.



Field training is offered at three locations across Massachusetts. Each field day begins with preparation work, where you'll review the site information and work through the Form 11 before heading out to the test pits. This gives you time to think through the evaluation process before getting into the field.

At each location, you'll visit four to five soil test pits on the property. Working alongside the instructors, you'll observe soil conditions, discuss what you're seeing, and walk through how each section of the Form 11 should be completed. Instructors are there to guide you, answer questions, and explain how field observations translate into what's required on the form.

The field portion is intentionally interactive and paced to support learning. It's a chance to practice field methodologies, ask questions in real time, and gain confidence reading soils and completing evaluations in a real-world setting.









The field exam day follows the same general structure as the training days, giving you a familiar format to work in. By that point, you'll have seen multiple pits, practiced completing Form 11s, and had direct instructor feedback—so nothing about the process should feel unfamiliar.





Looking forward to having you in class!



We look forward to working with you during the Soil Evaluator Class and helping you build the knowledge and confidence needed for successful soil evaluations.