

SEBAGO LAKE STATE PARK SOILS AND NATURAL RESOURCE WORKSHOP

By David Rocque

The Maine Association of Professional Soil Scientists in conjunction with the Maine Association of Wetland Scientists, Maine Association of Site Evaluators and Soil Science Society of Northern New England is once again sponsoring a late summer workshop focusing on soils and natural resources. This year, the workshop will be held on Wednesday, September 7, 2016 at Sebago Lake State Park in the south western Maine town of Casco, from 9:00 am until 3:30 pm. As in the past, this workshop will combine soil evaluation with natural resource identification and regulation issues. This workshop will feature 7 sites including: a sandy spodosol that transitions from an upland to a Histosol dominated wetland, a sandy flood plain soil transect, a lacustrine sediment with an Albic horizon, a boulder field in a low lying area and an upland (are these soils or non-soil areas?), vernal pool/stream complexes, stream/wetland complexes and a stream that flows into the lake when lake levels are down but is flooded during high water. Sebago Lake water levels are very carefully controlled by a dam. The lake is drawn down by exactly 5.5 feet every year in the late summer and early fall from high water levels in the spring. This flux makes it difficult to determine the normal high water mark of the lake or the Songo River and to determine where to begin measuring for setbacks in the shoreland zone.

For those of you not familiar with Sebago Lake State Park, it is one of Maine's original 5 State Parks, opened in 1938. Located on the north end of the state's second largest and deepest lake, on both sides of the Songo River, the park is 1500 acres in size. It includes Songo Lock State Historic Site. Songo Lock is the lone remaining lock, from a total of 28, on a 50 mile long canal system constructed in 1830. Originally constructed to transport 65 foot long canal boats back and forth from Harrison on Long Lake to Portland harbor, it was discontinued in 1872, replaced by the railroad. Today, Songo Lock is used lift pleasure boaters so they can travel upriver to Brandy Pond or Long Lake or lower them so they can travel down river to Sebago Lake. The locks large wooden doors and cast-iron sluice gears are still operated by hand. For lunch, you can stop by Songo Beach to use picnic tables beside a sand beach or travel to Songo Lock which also has a couple of picnic tables. Lunch is not provided so bring your own. There are limited opportunities to buy lunch nearby so I suggest packing your own or buying it on the way to the park.

As in the past, we will have a team of expert soil professionals evaluating and describing soils pits including Greg Granger, Dave Wilkinson and Nick Butler from the NRCS; State Site Evaluator Glenn Angell, consultants; Jim Logan and Chris Dorion; MASE President, Dale Knapp and myself. We will also have Mike Mullen, Chris Coppi and Colin Clark from the DEP; Karen Bolstridge from LUPC (formerly LURC); Glenn Angel from the State Septic System Program, Jay Clement from the Army Corps of Engineers and Portland Drinking Water Program representative, Nate Whalen to address regulatory issues. MAWS will provide a couple of botanists to evaluate the sites wetland status and be present during the day of the workshop. The hand dug soil pits were located and excavated last summer and are being monitored for depth to seasonal groundwater table by Sebago Lake State Park staff so there

should be some data to compare with seasonal groundwater table determinations made on the basis of soil morphology. Along with soil profile descriptions, the soils team will provide soil drainage class determinations, hydric soil determinations (both New England Field Indicators and National Indicators) and subsurface wastewater disposal rules classification using the SSWWD drainage key. Regulators will provide regulatory interpretations for protected natural resources including freshwater wetlands, streams and vernal pools. There will also be a discussion of shoreland zoning issues for sites near Sebago Lake and the Songo River. Since Sebago Lake is the drinking water supply for the Portland area, the Portland Water District has special rules for some activities within the Sebago Lake Watershed. A representative from the Portland Water District will discuss those special regulations. There are also local rules and regulations consultants need to be aware of. The Town of Casco Code Enforcement Officer will discuss local regulations adopted by his town.

Registration will be at the Park Headquarters on the Park Access Road, from 8:30 am to 9:00 am. The Park Headquarters is the first right off the Park Access Road, just past the intersection with State Park Road. Participants will be given a map showing the locations of the 7 sites they are to visit. Please bring with you a Munsell color book and copies of any keys you wish to use at the sites (NE Hydric Soil Field Indicators, National Hydric Soil Field Indicators, SSWWD Rules Drainage Key, MAPSS Drainage Key, Wetland Plant List etc.). You will have until 12:30 pm to visit the sites. Unlike the workshop at Mt. Blue State Park, these sites are relatively near each other. Each of the sites will have at least one monitor to show you the points of interest and answer general questions. They will also have copies of the soil pit evaluations and other determinations which they will share with you after you have made your own determinations.

At the conclusion of the field portion of the workshop, participants will gather at the Songo Beach picnic area at 1:30 pm for a group discussion of. Each of the sites will be discussed with participation from soil pit evaluators, other experts and regulators and I will do my best to keep things lively (as usual).

In keeping with tradition, I have chosen some challenging sites and soils. These are conditions you all see in the field and struggle with. Not all site assessments are straight forward or black and white. The purpose of this workshop is to bring consultants and regulators together to discuss difficult sites and attempt to come to a consensus on how to classify them. This will be a good opportunity to use the MASE Drainage Key on some difficult soils, with assistance from experts including the State Site Evaluator, and make stream setback determinations within the shoreland zone (tributary require a 75 foot setback).

This workshop should have broad appeal to soil scientists, wetland scientists, site evaluators, code enforcement officers, planners, municipal officials, regulators, lake association members, foresters and the general public. You can participate at whatever level is appropriate for your background and knowledge level (the experts stationed at each site will provide the level of assistance you require).

It should be a fun, interesting and informative day of camaraderie for all in a very scenic location.