

David Rocque

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to patrick, Bert, Elizabeth, Charlie, Richard, me

Good Morning All – I am finally done shoveling slush so I thought I would put together a few thoughts for the meeting later this afternoon.

The subject is Septic Systems and the focus is septic systems in sensitive soils. Sensitive soils are those where little treatment of the waste water is expected due to their being very coarse textured and/or shallow to bedrock. This limited treatment is what I refer to as “short Circuiting”. It is out of sight so it is out of mind. In reality though, all septic systems are potential threats to lake water quality for a number of reasons including:

1. Being old and out-of-date
2. Leaking disposal fields or septic tanks where the effluent flows to a concentrated channel and/or the lake
3. Being designed improperly
4. Being installed improperly
5. Being poorly maintained
6. Being abused
7. Being inadvertently damaged (for example driving over the drain field and crushing pipes or proprietary devices)
8. Having an inadvertent connection to a concentrated flow channel (for example a fill extension of gravel that goes to the edge of a ditch)
9. Having culverts, road runoff or drainage ditches discharge near or on them
10. Having a curtain drain installed down slope of a drain field
11. Having roof runoff flow on/over a drain field
12. Etc.

In an ideal world, every septic system within the watershed of Great Pond would be evaluated. That however, is impractical and unrealistic. What makes more sense is to look at septic systems that have the highest likelihood of significantly impacting the water quality of Great Pond. Below is how I would rate the likelihood of a septic system impacting Great Pond (or any lake or pond):

1. Pre-1974 septic systems installed in sandy/gravelly soils or shallow to bedrock soils
2. Pre-1974 septic systems installed in finer textured soils that are within 50 feet of the lake
3. Pre-1995 septic systems installed in sandy/gravelly soils (before a liner of finer soil was required if the disposal field is installed in soils coarser than the fill material required by the septic system rules)
4. Post 1995 septic systems installed in sandy/gravelly or shallow to bedrock soils
5. Post 1995 septic systems installed in any texture soil that is 50 feet or less from the lake or a concentrated flow channel
6. Post 1995 septic systems installed more than 50 feet from the lake

One of the biggest challenges with any widespread, voluntary septic system investigation is getting permission from the folks who own septic system that are the most likely to be impacting the lake. Most are aware of the likelihood and are reluctant to allow an investigation that may result in a costly replacement that is also likely to unsightly when installed. It is also very difficult for the investigator to adequately evaluate a who knows what system that may or may not be where the current owner thinks it is. It is much easier to evaluate a septic system for which there is a design on file to go by.