

## **NRCS ANCILLARY SEPTIC SYSTEM RATINGS CLASSES**

The seven interpretive separations, or classes, are defined below.

**Class 1 Conventional/Soil Replacement.** This class is composed of coarse textured, sandy and gravelly glacial outwash map units. Normally, conventional septic systems can be installed on these sites. Backfilling with finer textured material in the area of the absorption field is often required to slow the percolation rate enough to allow for thorough filtering of effluent. This process is commonly referred to as "soil replacement."

**Class 2 Conventional.** This class is composed of well drained glacial till or lacustrine map units with a loamy, friable substratum. Normally, conventional septic systems can be installed on these sites.

**Class 3 Mound.** This class is composed of soils that are limited by depth to seasonal high water table, depth to bedrock, or permeability of the substratum. These sites typically require mound systems. An at-grade system may be used on sites with a maximum slope of 12% if other site requirements are met.

**Class 4 Test, Mound, Curtain Drain.** This class is composed of map units that usually require on-site monitoring in order to establish their suitability for septic system absorption fields. A significant percentage of these map units are typically found unsuitable for septic tank absorption fields due to the depth of the high water table. Once a site is determined to be acceptable, mound systems are normally specified. Under certain conditions, curtain drains may be used to lower the water table to a depth suitable to meet State requirements.

**Class 5 Marginally Suitable.** This class is composed of map units that are generally unsuitable for septic tank absorption fields because of depth to bedrock or slope. In general, areas of these map units may be suitable for a mound system where the depth to bedrock ranges from 2 to 6 feet and the slope is less than 20 percent. They may be suitable for a conventional system where the depth to bedrock is greater than 6 feet and the slope is less than 20 percent.

**Class 6 Not Suited.** This class is composed of map units that are generally too rocky, too shallow, too wet, too steep, subject to flooding or otherwise unsuitable for use as septic tank absorption fields.

**Class 7 Not Rated.** Some map units have not been rated. These map units have little or no identifiable soil material. These areas include gravel and sand pits, urban land, quarries, and other areas where the native soil material has been excavated, regraded, filled, or covered over by urban structures. Onsite investigations are needed to determine the suitability of these map units for septic systems.

## **OPTIONAL THREE CLASS SYSTEM**

An alternative grouping for broad planning can be made using the following classes.

**Conventional Systems or Good.** Comprised of Classes 1 and 2.

**Mound Systems or Fair.** Comprised of Classes 3 and 4.

**Unsuitable or Poor.** Comprised of Classes 5, 6, and 7.

## **FOOTNOTES**

There is an imperfect fit between the range in characteristics of NRCS map units and the septic system criteria. The following three footnotes describe situations where there is an overlap between map unit ranges and the regulations. The footnotes amend the class rating in the tables for the map units affected.

- a. Some areas within this unit are less than 24 inches to bedrock and are not suitable for a septic system. However, there are other areas that are deeper and may be acceptable for a septic system.
- b. This map unit has a slope limitation. However, there may be areas within this unit that are flat enough to place a septic system, or cut and fill site modifications may produce a suitable area within the unit.
- C. Some areas within this map unit are less than 20% slope and are suitable for a mound system. However, other areas within this map unit exceed 20% slope and are not suitable for a mound system.