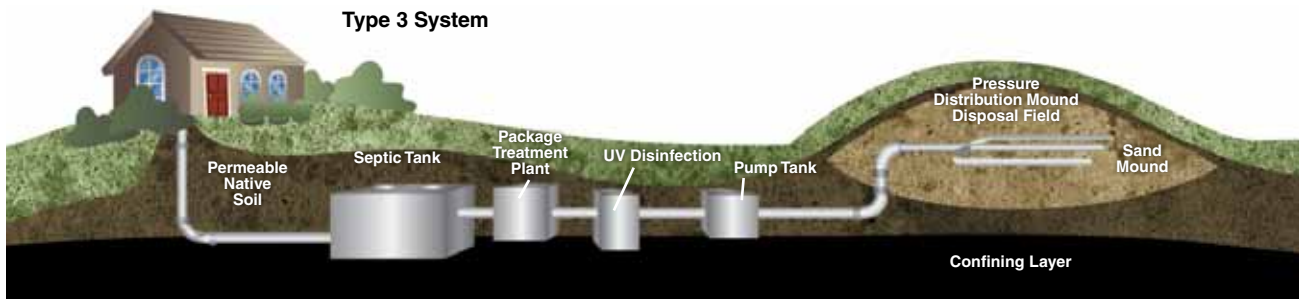


## Difficult Sites: Alternative Technologies

There are many properties in the CSRSD where traditional Type 1 and Type 2 septic systems are not suitable. Difficult sites, including slow draining soils, high water tables, steep slopes and extremely shallow native soil depths (i.e. less than 18 inches) are situations where a Type 3 system may

be required. A Type 3 system design is custom built to address specific site problems. Type 3 systems typically have a higher standard than a Type 2 system in the way they treat and disinfect the wastewater, and then discharge the treated effluent into a mounded soil system.

Failing to recognize and address severe site or soil limitations can result in your system failing at great financial cost to you, as well as posing a major inconvenience during system replacement, and a serious threat to your health and the environment.



## Seasonal Occupancy

If you only occupy your property for part of the year, you may have to give special consideration to your septic system. The ideal onsite system for a property with seasonal occupancy is a Type 1 septic tank and drainfield system. Even if you only use the property two weekends a year, a septic system will continue to function just as satisfactorily as if the home were occupied year-round.

However, if you have a Type 2 or Type 3 treatment system, most of these involve biological systems that require consistent feeding - and won't do well if starved for long periods of time.

### So, if you need to have a Type 2 or Type 3 system, what can you do?

First, make sure your Qualified Professional is aware of how you

intend to use your property and ask him or her to take that into consideration in advising you on the appropriate system for your property. Generally avoid treatment systems that are suspended-growth processes requiring blowers or jet pumps to provide air and mixing energy. You don't want high energy-use pumps and blowers operating while you are away, and these systems can take several weeks to recover after long periods without wastewater. Instead, consider using an attached-growth bed-style type of wastewater treatment system. These systems typically use low-energy recirculation pumps that can be left on while you are away. The bacteria in these systems attach to the media in the process and recover faster from long periods without wastewater.

Your Qualified Professional should be able to assess your occupancy

characteristics and help you make an appropriate system selection. There are both non-proprietary (public domain) and proprietary (commercial) attached-growth wastewater treatment systems available. Examples of non-proprietary processes include:

- Intermittent Sand Filters
- Recirculating Sand Filters
- Recirculating Gravel Filters
- Constructed Wetlands

There are also a large number of proprietary and patented options. The primary advantages of using commercial technologies is they may require as little as 5 percent of the land area required for non-proprietary technologies (i.e. 20 sq ft versus 400 sq ft per household), and commercial technology suppliers can provide you with maintenance support.