

Water and Wastewater Alternatives for Conservation Subdivisions

Towns, developers and health officials have many proven methods to solve water and wastewater requirements. Some of these solutions are illustrated below. Soil type, land cover, zoning, slopes and other variables make each site a unique challenge.

A Continuum of Choices

- Reduce lot size to one acre (in zones greater than one acre minimum), with balance placed in conservation use.
- Provide community wells with smaller average lot sizes, depending on slope, soil type, etc.*
- Provide shared septic systems, allowing flexible lot sizes, some 1/4 acre or less, or multi-family mixed with single-family.
- Use a combination of shared water system and common septic systems.
- Use a common septic system with a secondary treatment unit.
- Use a “package plant” treatment system which discharges into an intermittent or full flowing stream.

*Shared and community systems must be owned and operated by a municipality or County Water and Wastewater Authority.

... which can be applied in countless ways

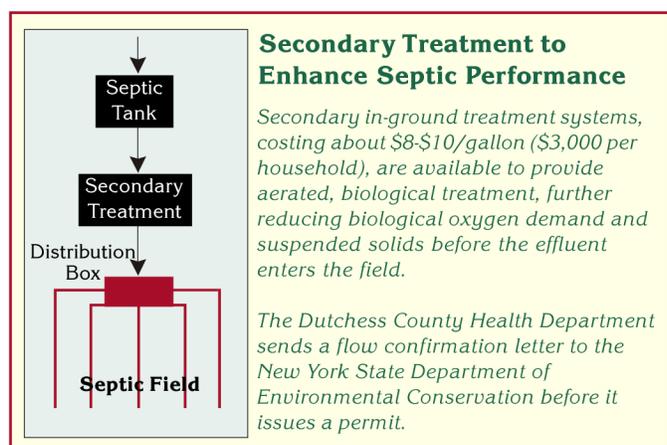


This proposed 54-acre subdivision in a two acre zone calls for only 20 acres to be used for housing. The development is served by a community well. Ten smaller homes, perhaps townhouses, are integrated into the site plan, as well as two estate lots. The small units discharge wastewater into a common septic field. Two houses share a septic system because of poor soils.



Innovative natural treatment systems use plants, fish and bacteria to digest wastewater in a greenhouse setting that resembles a botanical garden and school laboratory. This plant serves 1,600 residents in the City of South Burlington, Vermont.

Living Technologies, Inc.



Sources:

Living Technologies, Inc., *A Living Machine*, 1999
 New York State, *Appendix 75-A Wastewater Treatment Standards - Individual Household Systems*, 1990
 New York State Department of Health, *Individual Residential Wastewater Treatment Systems: Design Handbook*, 1996
 Dutchess County Department of Health, *Water and Wastewater Systems: Design and Construction Standards*, 1998