

Composting toilets are not included in the CWMP Draft Recommended Plan options for the Megansett-Squeteague Harbor watershed that I live in (Alternatives Analysis Table 2, page 14). Composting toilets should be included. They are allowed by the Town of Bourne Health Regulations, and State regulations 310 CMR 15.289 (3) (a). Application forms and instructions are available at Town Hall.

General Use Individual Alternative (GUIA) nitrogen reducing systems are included in the plan. Composting toilets remove much more nitrogen than GUIA systems. Alternatives Analysis Table 2, page 14 gives expected nitrogen removal of 28% by GUIA systems, and 62% by composting toilets (more than twice the removal). The compost can be transported to a Wastewater Treatment Facility (WTF) by a licensed septage hauler in accordance with State Regulations. Since there are no WTFs receiving septage in the Megansett-Squeteague Watershed, the nitrogen would be removed from the Watershed.

Page 19 of the Draft Recommended Plan states "Beginning in July 2025, individual homeowners located in the TMDL watersheds are required to upgrade their onsite septic systems to the Best Available Nitrogen Reducing Technology". A composting toilet removing twice as much nitrogen as a GUIA would be better technology. The Draft Recommended Plan Table 20, page 47: GUIA Opinion Probable Construction Costs - New Installation, \$42,425. Table 22, page 48: GUIA Operation, Monitoring and Maintenance Costs, average annual \$2,390. A self-contained composting toilet with internal composting that is used like a regular toilet can be purchased for as little as \$2,000.

The Sun-Mar Excel (\$2,050 <https://usa.sun-mar.com>) is a good example (recommended by a friend using one in another town on Buzzards Bay). It is self-contained, and the urine is composted, not diverted. Installation cost would be a small fraction of the amount for GUIA systems (probably in the range of regular toilet installation). A small fan (35 watts) removes odors through a vent pipe. A small heater (250 watts) maintains temperature for composting. The heater is controlled by a thermostat and is only on part of the time. Sun-Mar estimates that the average power consumption is about 150 watts (0.15 KW) so electricity cost would be less than \$500/year at \$0.36/KWH.

Disposal of the compost by a licensed septage hauler once a year should be less than the cost of pumping out a septic tank (about \$300) since the volume would be so small. So, the operating costs should be about \$800/year or less. Houses with more than one bathroom could either install multiple self-contained toilets, or a central compost tank connected to a number of toilets. The Sun-Mar Centrex 3000 connects to and composts from either waterless or ultra-low flush (1 pint/flush) toilets.

A number of homeowners are very concerned about the high cost of GUIA systems and might prefer less expensive composting toilets.