

Municipal Beaches

Blue Shutters Town Beach & Charlestown Town Beach

Charlestown, RI

Profile

- Older public bathhouses with flushing toilets and septic systems
- Portable restrooms in parking lots
- 600 people on a peak day
- 270 car parking lots
- Non-ADA compliant restrooms

Challenge

- Drastically reduce fresh water usage
- Minimize wastewater flows
- Eliminate nitrogen from wastewater
- Upgrade and recycle existing septic systems
- Provide ADA accessibility

Solution

- Installed Clivus composters and Nepon 3-ounce foam-flush toilets
- Discharged nitrogen-rich liquid compost effluent to designated storage
- Discharged greywater only to the upgraded existing septic
- Drastically reduced fresh water consumption
- Substantially reduced wastewater flows
- Building design by Azzinaro-Larson Architects, Westerly, RI
- Construction by V&M Construction, Inc., Westerly, RI

Environmentally friendly bathhouse.



ADA compliant restrooms.



Portable restrooms replaced by new bathhouse.



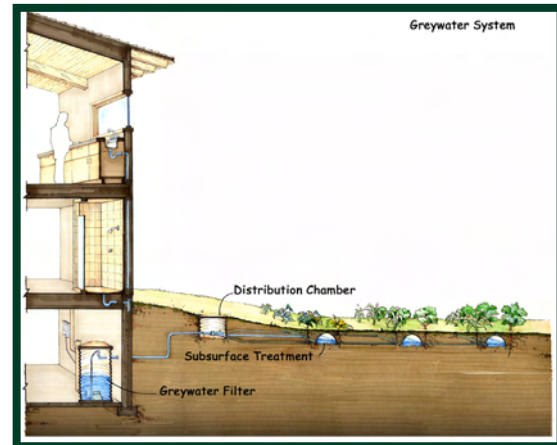


The restrooms are clean, odor-free, easy to maintain, and have a conventional look and feel.

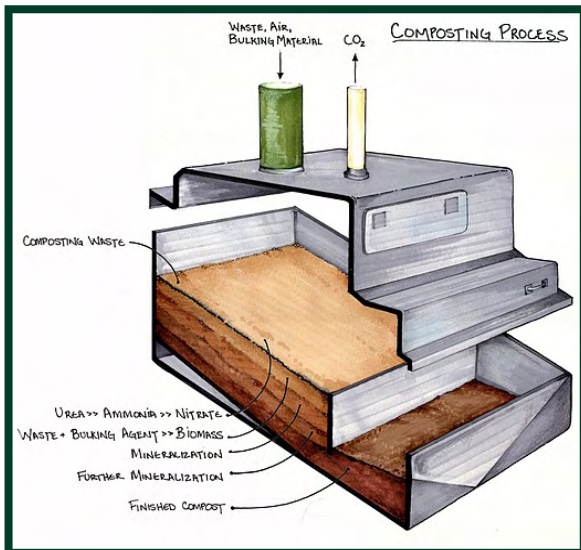


Clivus New England is involved in its projects from pre-conception through the design and installation processes to ensure 100% feasibility.

Greywater from sinks is discharged to a reduced size soil absorption system (new Rule 36.2 allows a 40% reduction). When used in conjunction with a liquid storage tank that collects the liquid end product from the composter the greywater is free of Nitrogen from toilet waste.



All Clivus systems are NSF Standard 41 Tested and Certified



Composting takes place in all soils which support plant and animal life. The Clivus systems employ the same process in the controlled environment of the composting chamber. As waste breaks down in the composter a less chemically complex, more chemically stable substance rich in organic matter and very similar to soil is produced. Human waste consisting mostly of water is reduced by over 90%. By-products of the composting process are water vapor and CO₂ and are released harmlessly into the atmosphere through the ventilation system.

