

Public Facility

Salisbury Beach
State Reservation
Salisbury, MA

Profile

- 3 comfort station buildings, 900 sq. ft. each with lifeguard and staff facilities
- 6 indoor showers for staff
- 18 public, outdoor showers
- Tri-seasonal usage
- 10,000 people per day, peak

Challenge

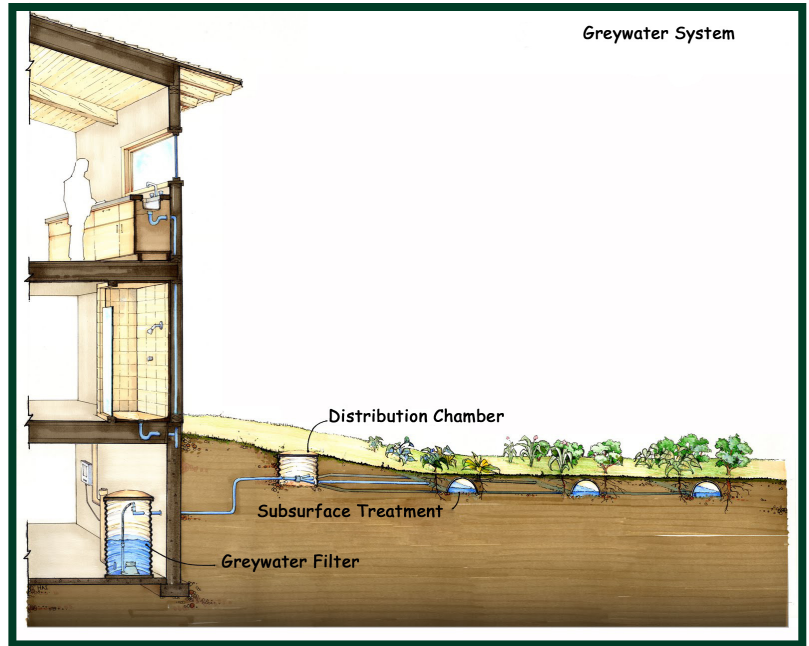
- Protect environmentally sensitive barrier beach and dunes
- Increase life of SAS (soil absorption system) by years
- Eliminate polluting discharge from flushing toilets
- Drastically reduce wastewater flows

Solution

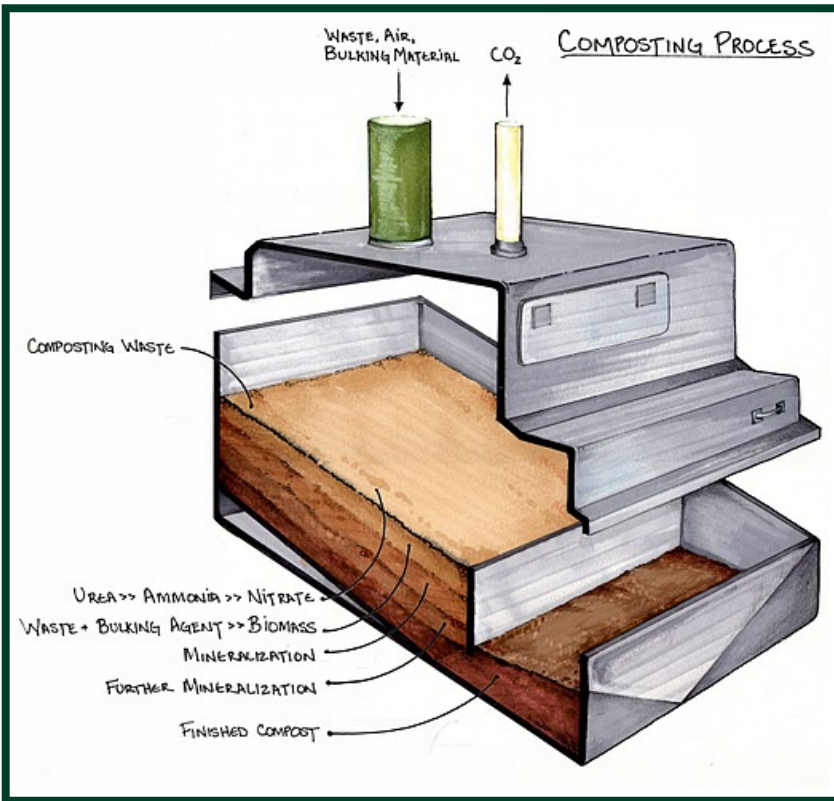
- Installed 3 separate comfort stations throughout the park to minimize single site disruption and foot traffic
- Installed Clivus composters with waterless toilets and urinals
- Eliminated nitrogen discharge from toilets
- Eliminated sewage altogether
- Discharged greywater-only
- Drastically reduced wastewater flow saves over 1,000,000 gallons per year



Greywater from sinks and showers is sent through the greywater filter before being sent outside to a much reduced size septic or soil absorption system. When used in conjunction with a liquid end product from the compostor the greywater is virtually free of Nitrogen. Liquids from Clivus greywater and composting systems meet the EPA standards for swimming quality water.



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 compostor 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%. Byproducts of the composting process are water vapor and CO₂ and are released harmlessly into the atmosphere through the ventilation system.

