

Public Facility

Trustees of the Reservations - Crane Beach

Ipswich, MA



Profile

- 7,500 people on a peak day
- 4-mile beach
- 5 miles of walking trails
- Wildlife preserve
- Snack bar
- Year-round facility
- Various sponsored evening activities
- Piping Plover nesting grounds
- Decades old bathhouse and septic system nearing “end of life”
- No sewer nearby



Challenge

- Mitigate nitrogen output
- Preserve landscape and avoid interfering with wildlife
- Conserve fresh water

Solution

- Eliminated sewage altogether
- Saved over 1,000,000 gallons of water per season
- Discharge greywater only. Drip dispersal by *Oakson, Inc., Gloucester, MA*
- Bathhouse architecture by *Allsopp Design, Hamilton, MA*
- Engineering by *C.G. Johnson Engineering, Inc., South Hamilton, MA*

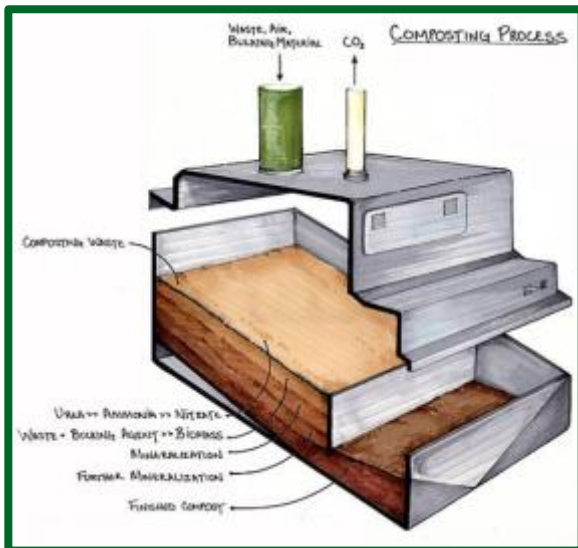


*Restrooms using Clivus systems
look like conventional bathrooms*



Clivus New England is involved in its projects from pre-conception through the design and installation processes to ensure 100% feasibility. Usage data from the owner is collected for proper system sizing and architectural plans are analyzed to ensure that structures can incorporate the Clivus equipment without undermining building or system designs. Whether it's one composter and one toilet, or several composters and many toilets, Clivus technicians work with contractors and plumbers to guarantee and certify that installations meet the manufacturer's requirements.

All Clivus systems are NSF Standard 41 Tested and Certified



Composting takes place in all soils that 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.

