



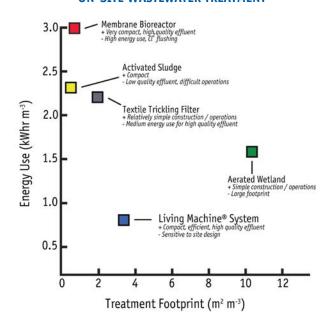
THE MOST EFFICIENT & COST EFFECTIVE ECOLOGICAL SOLUTION FOR TREATING AND REUSING WASTEWATER

THE LIVING MACHINE®SYSTEM

Living Machine® Technology blends cutting-edge science and engineering with plants and hard-working bacteria to efficiently treat and reuse wastewater, providing lasting water solutions for communities everywhere. Based on the principles of wetland ecology, the patented tidal process treats wastewater to meet high quality reuse standards, making Living Machine® technology the most energy-efficient.

At a glance, the Living Machine® System incorporates a series of wetland cells, or basins, filled with optimized gravel that promotes the development of micro-ecosystems. As water moves through the system, the cells are alternately flooded and drained to create multiple tidal cycles each day, much like we find in nature, resulting in high quality reusable water.

SIZE VS. ENERGY COMPARISON ON-SITE WASTEWATER TREATMENT



LIVING MACHINE SYSTEMS, L3C

Living Machine® Systems, L3C - based in Charlottesville, Virginia - is a social benefit corporation, focused exclusively on ensuring lasting water resources for communities across the globe. Our proven wastewater treatment and reuse system is efficient and ecological, with a small footprint.

From Ghana to San Francisco and from schools and office buildings to hotels, the Living Machine® System has been installed in nearly 30 locations around the world.

LIVING MACHINE TECHNOLOGY VS. VARIOUS ONSITE WATER TREATMENT SYSTEMS		Living Machine®	Activated Sludge	Membrane Bioreactor	Subsurface Wetland
	Attractive	~	X	×	~
	Low Capital Cost	~	~	Х	~
•	Energy Efficient	~	Х	Х	v
	Low Operation & Maintenance Expenses	v	×	х	~
	Small Footprint	~	~	~	X
	Reuse Quality	~	Х	~	Х

THE LIVING MACHINE® PROCESS

The Living Machine® System treats water through several stages. While mimicking the processes of natural coastal wetlands, the patented components are more efficient than any other system available – giving the technology a smaller physical footprint and a lighter carbon footprint.



San Francisco Public Utilities Commission, San Francisco, CA

How IT Works

To treat wastewater, the Living Machine® System uses the latest technologies and engineering to recreate the ecology of natural coastal wetlands. After an initial settling stage, the system turbo-charges nature's own processes, pumping wastewater into 'tidal-flow' wetland cells – gravel-filled planters – which are alternately flooded and drained to oxygenate the wastewater. The specially-engineered gravel within the cells promotes the development of micro-ecosystems, which efficiently remove nutrients and solids from the wastewater, resulting in high quality effluent. Although a typical Living Machine® system recycles thousands of gallons of water a day, everything occurs below the wetland surface. All the casual observer sees are lush, vibrant plantings.

The final polishing stage, which involves filtration and disinfection, leaves water crystal clear and ready for reuse or safe environmental disposal. Online sensors continuously monitor water quality to ensure that reclaimed water is completely safe.

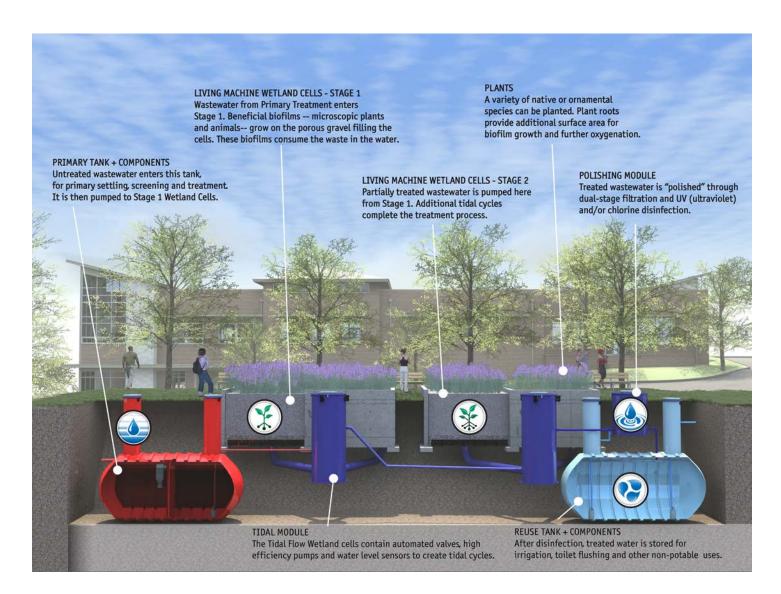












LIVING MACHINE® BENEFITS

- Opportunity for on-site wastewater reuse.
- Energy efficient design means lower operations and maintenance costs than other on-site systems.
- Reduction in construction costs when compared to other reuse technologies.
- a living laboratory with on-site Provides educational opportunities.
- Integrates with rainwater collection to increase reuse benefits.
- Attractive interior and/or exterior foliage that safely integrates into public space.
- Accepts all wastewater and produces high quality water that an be reused to flush toilets, supply cooling towers, irrigate, etc..
- Helps save water in remote or drought prone areas.
- Regularly exceeds target water quality standards.
- Helps projects attained LEED certification by the U.S. Green Building Council.
- The Living Machine System's modular design can expand commensurate with new construction, significantly cutting initial building costs.
- Helps communities maintain lasting water resources.



Evergreen School - Western Wayne, PA

CURRENT GENERATION LIVING MACHINE® PROJECTS

- San Francisco Public Utilities Commission Headquarters - San Francisco, CA
- US Marine Recruit Depot San Diego, CA
- Sun Rise Housing Development San Juan Island, WA
- Evergreen Elementary, Western Wayne, PA
- Port of Portland Portland, OR
- Furman University Greenville, SC
- YMCA Camp Campbell Boulder Creek, CA
- Eco Centre Lake Worth, FL
- Old Trail School Bath, OH
- Esalen Institute Big Sur, CA
- Guilford Schools Greensboro, NC
- IslandWood Bainbridge Isle, WA
- Las Vegas Regional Animal Campus Las Vegas,



- Sharon Rest Area Sharon, VT
- El Monte Sagrado Resort Taos, NM
- MERTS-Clatsop Community College Astoria, OR
- Northern Zoo City of Emmen, Netherlands
- Oberlin College Oberlin, OH
- Darrow School New Lebanon, NY
- Conserve School Land O' Lakes, WI
- YMCA Camp Seymour Gig Harbor, WA
- Anita B. Gorman Conservation Discovery Center, Kansas City, MO



Port of Portland Headquarters - Portland, OR



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