Treating Wastewater for a Positive Change

ECO-LIVING Water is a precious commodity in our society that's worth preserving.

GREENER OPTIONS: Conventional sewage treatment is expensive to operate. Some small communities are looking for alternative ways to manage wastewater.

Recycling wastewater can have both major economic and environmental benefits for communities, according to the US EPA and wastewater system manufacturers such as Robert J Rebori, President of Bio-Microbics, Inc.

Discharging wastewater to surface waters is currently the most common way community treatment plants dispose of wastewater. With the ever-growing population the burden to local streams is also increasing, Rebori said.

Onsite septic and decentralized distributed wastewater treatment systems are an important part of the country's permanent wastewater infrastructure, according to the National Onsite Wastewater Recycling Association (NOWRA). Wastewater infrastructure represents about 30 percent of new construction in the U.S. market alone and they serve more than 60 million Americans. According to the US EPA, failing septic systems may contaminate nearby waters, putting families' health at risk and costing thousands of dollars in repairs or replacement.

Finding support

"Onsite wastewater management systems are a 'green technology' because the treated waste recharges local aquifers. They also have a smaller carbon

Drinkable Water Supply on Sharp Decline, Beckons for Intervention

If you type the phrase "how long can you last without" into Google, given the thousands of suggestions to fire back to complete the phrase, it might surprise you that "water" is the first word to bubble up and claim top spot.

New Study Shows Major Environmental Impact of Meat Consumption

Americans eat more meat than almost anyone else in the world. However, meat has a more damaging impact on the environment than any other food we consume.

footprint because most onsite systems use little or no energy to move water."

EPA's SepticSmart program educates homeowners about proper septic system care and maintenance all year long. In addition, it serves as an online resource for industry practitioners, local governments and community organizations, providing access to tools to educate clients and residents.

While decentralized systems have been used for nearly a century, many still do not understand them quite well, which has resulted in NOWRA not receiving the financial, technical, managerial or policy support received by other sectors of the wastewater treatment industry, according to an article on WaterOnline.com

Decentralized wastewater treatments, which deal with wastewater at the point of generation and disperse it close to the source, have become an attractive water reuse option. option or recharging the valuable groundwater resources. Once the wastewater is treated, it can be used for grey water reuse for that property.

Protecting our resources

"Reusing treated blackwater and greywater to subsurface irrigation for landscaped or green areas, wash down for machines and floors, toilet water, or for other non-potable uses can help conserve potable water sources," Rebori said.

Other innovative uses for treated water can be used for fire-fighting sprinkler systems, curing concrete in arid desert climates to keep it from cracking, make-up water for cooling towers and more.

Watering with wastewater adds nutrients and minerals to the soil that are good for plants. It also helps to recharge valuable groundwater resources. Applying wastewater to land also provides the soil with additional treatment through naturally occurring physical, biological and chemical processes, Rebori said.

According to the Environmental Protection Agency, onsite wastewater management systems are a 'green technology' with the ability to recycle treated water to recharge local aquifers or provide the opportunity to reuse onsite. They also have a smaller carbon footprint because most onsite systems are treating smaller amounts of water rather than grinding up non-biological items entering the drains, pumping to move millions of gallons of this wastewater from all different commercial properties, factories, and homes for miles, and treating at a municipal plant further away from the original water sources.

"We see the growing interest, education and the need for better water management systems," Rebori said of the rising interest of sustainable innovations.

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