

Single Stream Recycling

A Simple Solution to New Challenges

by Frank Brunner

In 2007, it's safe to say everyone agrees recycling is good for our communities and environment. Nonetheless, recycling logistics can be a real challenge, and recycling rates are far below what they could and should be. Meanwhile, the demand for consumer products with recycled content is ever-increasing while supplies of raw materials are declining. Effective recycling of our waste will become central in our efforts to make society more sustainable over the coming years.

Traditionally viewed as an add-on to existing waste collection services, an increasing number of American municipalities and businesses are beginning to recognize that recycling should be the core focus of waste resource management, with garbage constituting what cannot be recycled. Progressive cities and companies are taking the lead by developing innovative ways to maximize the amount of recyclables they reclaim from their waste.

One way by which communities and businesses can rapidly and dramatically increase their recycling rates is by switching to Single Stream recycling programs. These programs, pioneered by Waste Management and refined over the past decade, can provide the high-quality recovered materials demanded by manufacturers while streamlining collection and transportation of waste. Single Stream recycling

Benefits of Single Stream Recycling

- Single bin/cart collection programs
- Increased recycling rates over previous recycling programs by an average of 30 percent
- Fewer trucks on the road which leads to less traffic and wear-and-tear to pavement
- Lower labor and fuel costs
- Extended life of landfills
- Reduction of CO₂ and methane emissions (greenhouse gases linked directly to climate change)

simplifies the whole process by allowing customers to deposit recyclable paper, plastic, glass, steel, and aluminum materials into a single container for collection. Single containers allow conventional collection trucks to collect all recyclables, rather than requiring multiple specialized vehicles. At the recycling center, the mixed recyclable stream is processed into sorted recyclable materials.

More than 500 municipalities have already instituted Single Stream recycling collection programs. Switching to Single Stream collection offers a number of benefits to local governments, including increasing the volume of recovered materials, boosting the diversion rate from local landfills, and reducing collection costs. Recently, Collier County in Southwest Florida (Naples area) switched to an automated Single Stream recycling system, and the county's recycling volumes went up by 56 percent.

In the past, legitimate reservations about the quality of materials recovered through Single Stream recycling fueled skepticism among mills and manufacturers. However, technological developments have facilitated higher quality recycled products while maintaining the efficiency and high-load capabilities of Single Stream recycling. Readily available, high-quality recyclables result in cheaper, higher quality products made from recycled materials, which in turn inspires consumer confidence.

As the leading recycler in North America, one third of Waste Management's

current portfolio of recycling facilities nationwide uses Single Stream technology. From 2002 to 2006, the volume of material processed in our Single Stream recycling facilities nearly tripled, from about 722,000 tons in 2002 to more than two million tons in 2006. We recently announced that we plan to triple the amount of materials we recycle by 2020, and Single Stream technology will play an important part in that goal.

The waste disposal and recovery cycle involves multiple participants, all of whom have an interest in recovering as much as possible from what we throw away. The success of recycling programs depends not only on efficient collection and effective processing, but ultimately on the willingness of consumers to participate and buy products manufactured from recycled goods. Meanwhile, forward-thinking businesses and cities are taking the lead by switching to Single Stream recycling to simplify the process.

WM would like to pursue building and operating a state of the art Single Stream recycling facility in Southwest Florida. Several communities have expressed interest in partnering with WM to offer a Single Stream recycling solution to their residents. WM will continue the dialogue with SWFL leaders in order to make Single Stream recycling available to SWFL in the future.

Frank Brunner serves as the Manager of Government & Community Relations for Waste Management of Southwest Florida. As part of his duties, Frank works with local government officials to ensure they are informed regarding changes in the Waste Management industry, emerging technologies, and value added programs that will help to improve sustainability efforts as well as ensure safe and environmentally responsible methods for managing waste streams in our region. Frank grew up in Manatee County and currently resides in Palmetto with his wife Tamara and twin boys, Joshua and Luke. He spent 10 years serving in local government and also serves on the board of several non-profit and civic organizations in SWFL. Contact him at fbrunne1@wm.com, or visit www.thinkgreen.com.

