



# Renewable News

Winter 2010

## Winter Wonderland in Waste

*No snow, no ice sculpture; it's a conference!*

**J**oin us in Orlando for a "Winter Wonderland in Waste." During these tough economic times, when travel and training budgets are limited, Recycle Florida Today and SWANA are partnering to give members a "2 for 1" conference rolled into one issue-filled day.

On Wednesday, January 27, 2010, the conference registration begins along with a joint continental breakfast, followed by a separate morning agenda for each organization. All attendees are back together for lunch followed by a half-day joint session on House Bill 7135.

Tuesday, January 26th includes Board of Directors meetings for both organizations followed by an evening mixer. All conference participants are welcome to attend.

To keep the conference affordable, the registration fee is \$100 for members who register by January 20th, and room rates are only \$99 for those who want to stay. The conference will be held at the [DoubleTree Resort on International Drive in Orlando](#). To register for the conference, visit [www.recyclefloridatoday.org/PDF/RFT\\_IssuesForum.pdf](http://www.recyclefloridatoday.org/PDF/RFT_IssuesForum.pdf). For more information about the conference and/or RFT, call Heather at (850) 907-1278.





# MRFing our Way to Diversion: Developments and Trends in Material Processing

By Robin Mitchell, Kessler Consulting, Inc.

Efforts to increase commercial recycling in the Tampa Bay area (Pinellas, Hillsborough and Manatee Counties) have been hampered by a lack of adequate processing infrastructure. In fact, a review of MRFs in the area revealed that no MRF has the ability to process even dual stream recyclables (specifically commingled containers). To begin to address this issue, Pinellas County received an Innovative Grant from DEP to conduct a MRF technology review and feasibility study.

Research of state-of-the-art processing technologies and site visits to MRFs in California revealed trends and developments in materials processing that are important to Florida communities striving to maximize recycling.

**Fully integrated systems:** Facilities located in areas with high recycling/waste diversion goals tend to have truly integrated systems designed to capture all materials possible. In addition to traditional MRF lines, most of the facilities visited also had extensive C&D recovery operations and organics (yard and food waste) composting. Such fully integrated systems could boost recycling rates in Florida, where C&D debris and organics comprise more than 40% of MSW.

**Single stream MRFs:** Once thought to be cutting edge, single stream processing is now commonplace in many parts of the country. At least 30% of MRFs in the U.S. process single stream recyclables. Lower collection costs, higher material recovery rates and technological improvements have contributed to this growth. Fourth and fifth generation single stream equipment lines are producing clean, marketable commodities.

**Mixed waste MRFs:** Mixed waste MRFs (once known as dirty MRFs) are again finding a place in solid

waste management systems. Some communities use them in lieu of separate collection of recyclable materials, while others complement existing recycling systems by processing waste streams that are difficult to target for recycling (e.g. multi-family and commercial). A MRF in San Jose, California, which boasts a 75% waste diversion rate, has both single stream and mixed waste lines.

**Larger, more automated MRFs:** With the reduction in material separation at the source comes the need for increased automation and more specialized equipment. Although the average capital cost of these more highly automated facilities can be high, regionalization to achieve economies of scale can result in a lower average capital cost per daily ton of throughput than less technologically advanced MRF.

**Green building design:** Awareness of climate change, sustainability goals, and rising energy prices are fueling a trend to employ green building standards in new construction and renovation projects, including MRFs. While green building designs can be more costly, they often have short payback periods because of resulting reductions in waste disposal and energy and water usage.

What's the driving factor behind these fully integrated systems and processing innovations? State and local policies calling for 50% and as high as 75% waste diversion (sound familiar?) are driving public and private sector investment in processing infrastructure and pushing processors to maximize material recovery. The good news for Florida is that these types of systems are available and have demonstrated success in other locations. We just need to develop more of them here in Florida.



GreenWaste Recovery's Single Stream/Mixed Waste MRF, San Jose, CA