

Recycling food and materials important to way of life

Reports show local Wisconsin recycling programs are benefiting from record high values of recyclable materials, driven by increased demand. High recyclable material values have led to examples of lower local per-capita recycling costs and increased recycling revenues at a variety of recycling facilities across Wisconsin, a reversal from two years ago, when shifts in global markets caused challenges for recycling programs nationwide.

From 2019, reports indicated that shrinking demand for recycled materials were widespread and recyclable materials values were seen by some as an economic "crisis" in recycling.

Mixed paper sold for little to no value in 2019. Currently, mixed paper sells for over \$100 per ton, while plastic has seen a comparable boost, because of the need for various single-use items as a result of COVID-19, as well as brand owners increasing their use of post-consumer recycled content.

High density polyethylene natural plastic (#2 HDPE), the material milk jugs are made of, brings in a record \$2,000 per ton, more than aluminum, a long-time highest-value recyclable commodity.

"I have been in the recycling field for 32 years and have never seen milk jugs more valuable than aluminum," said Steve Melstrom, Pierce County solid waste administrator.

Demand for cardboard and paper has been fueled by box manufacturers, eager to provide shipping containers for an expanding e-commerce society.

While recycling values vary across the state, current Midwest price indexes, show cardboard is worth six times more than at the close of 2019, and demand for other materials like milk jugs, soda bottles, paper and cans, have improved significantly.

Recycling supplies Wisconsin paper mills and other markets in the Midwest, conserves natural resources and landfill space, decreases energy usage and greenhouse gas emissions, and can save local governments money.

"The increase in recycling revenues has helped offset the cost of garbage disposal in several communities," said Mark Walter, Brown County's Business Development manager. "One of our villages mentioned that the recycling revenue they will receive this year, will pay for their landfill tipping fees. This gives the village the flexibility to look at alternative disposal efforts, like curbside food waste and organics collections."

One way to keep this demand for recyclables high, is to minimize contamination in the recycling stream. Residents and businesses can assist these efforts, by keeping unrecyclable items out of the recycling bin. This will reduce labor and disposal costs at sorting facilities, and improve the quality and competitiveness of recyclable commodities, relative to virgin materials.

While recycling is at an all-time high, disposing of food waste in garbage is also on the rise. A 2020-21 statewide waste characterization study, provides insight into what is going into Wisconsin landfills, and is a planning tool for waste reduction and minimization efforts.

The Wisconsin DNR contracted with SCS Engineers, an environmental consulting and contracting firm, to complete the study. Crews visited 14 landfills and one solid waste transfer station around the state, and hand-sorted 398 samples of solid waste from residential and commercial sectors.

In addition, SCS staff visually inspected 659 samples of construction and demolition debris. Samples were sorted into 85 distinct waste components, that were grouped into eight waste categories.

The sorting took place over two distinct periods, from September to November 2020, and March through April 2021. Therefore, study results are likely affected by the COVID-19 pandemic.

Two, three-month windows of data collection, should help minimize the impacts of any particular event within the pandemic. Because this study is a snapshot of Wisconsin landfills in 2020 and 2021, it should be regarded as representative of Wisconsin's landfilled municipal solid waste, within that timeframe.

Organic waste – materials such as food and yard waste – was the largest category of waste found in landfills statewide. Specifically, wasted food, which is formerly edible food that was spoiled or discarded without being eaten, was the largest component, at 14.5 percent, and inedible food scraps, such as banana peels, was the third largest, at 6 percent.

Combined, these food wastes make up double the percentage found in a previous Wisconsin landfill study, conducted in 2009.

“Focusing efforts to reduce organic wastes can make a significant difference in Wisconsin's waste stream, and the environment,” says Casey Lamensky, DNR solid waste coordinator. “In addition to taking up valuable landfill space, landfilling these materials contributes heavily to the production of methane, a greenhouse gas 28 times more powerful than carbon dioxide if released into the atmosphere.”

There are simple things households can do to reduce landfilled food waste that also save money. Plan ahead, by taking a shopping list to the grocery store to prevent buying in excess, store food properly to extend its life, understand food expiration labels and compost food scraps.