



Emmet County Department of Public Works The Whole Works 2019

Annual Report to the Emmet County Board of Commissioners from the Emmet County DPW Board and Staff

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Great New Leadership Team



Andi Shepherd
Director



Wendy Fought
*Drop-off Center and
Safety Manager*



Josh Brubacher
Operations Manager



DPW PEOPLE



Seltzer Moves On After 30 Years As Director

Elisa Seltzer, who spearheaded the development of Emmet County Recycling into the locally popular, nationally prominent program it is today, moved on in 2019. She left both a legacy of solid programs and many new developments in the works.

Ms. Seltzer's accomplishments serve every Emmet County resident and business most every day. Over 80% of county households recycle with us and virtually all garbage disposed in the county flows through our Waste Transfer Station.

Seltzer often framed her approach as making recycling, "convenient, comprehensive, and cost-effective," for example with the our 13 handy recycling drop sites and the curbside collection program. She upgraded or expanded facilities to improve sorting and storage efficiency a half-dozen times.

The policy framework that supports it all—which Seltzer was instrumental in developing—is another major factor in the Emmet County Department of Public Works' (DPW) success. Seltzer's choice of a dual-stream recycling system has been key to ECR's ability to partner with local and Michigan manufacturers, maximize recycling revenues, and repeatedly weather downturns in markets for recyclables.

Elisa has gone on to serve as a Senior Consultant with Resource Recycling Systems, one of the top recycling consulting firms in the world. Her expertise will serve to improve recycling in many communities, counties and states, and the industry as a whole.

We can't thank you enough, Elisa!



New Director Has Deep Experience with ECDPW

Elisa Seltzer's replacement, Andi Shepherd, started with ECR in 2014 as an intern, a position that exposed her to the inner workings of many of our systems. She was willing to take on anything in any area and very effective in all of them.

She was rehired as a contract employee in the fall of 2015 becoming one of our lead data analysts, assisting with communications, and implementing projects like our curbside participation audits. As soon as possible we made her a permanent county employee in the new role of Assistant to the Director. This position added writing grant applications and reports to Andi's responsibilities.

With Elisa's departure, Andi was a natural fit for the job of Interim Director. After a nationwide search, she was unanimously chosen for the permanent position. As Director, initially her main goal was to keep up the high momentum the department has always achieved. The great team that Elisa had built persevered in keeping everything in motion through the transitions.

In her first year, Andi handled extensive staffing changes and moved forward with major recycle-processing upgrades. Other highlights which Andi points to include formalizing our mission and vision statements, offering home composting workshops, and the new campaign on how to properly store and recycle batteries. She looks forward to a variety of interesting projects planned for 2020.

Thank you for taking the reins, Andi!



New Managers: Josh Brubacher and Wendy Fought

When our long-time Superintendent, Don Mapes, retired in late 2018, our then-Recycle Operations Technician, Josh Brubacher, stepped up to fill many of the superintendent’s duties until a permanent one could be hired. When the hiring process did not find a match to handle the full set of roles that had landed on Don’s plate over 38 years, we decided it was time to split the job in two. The result was Recycle Operations Manager and Drop-off Center Manager positions.

Josh was then promoted to the Recycle Operations Manager position. Josh started with the DPW as a recycle processor in 2009 and had worked his way up to the head of recycle processing and shipping. In that role, he was responsible for overseeing the recycle sort team; shipments of materials, and a variety of equipment. As the Recycle Operations Manager, his tasks have expanded to include maintenance of all buildings and equipment on site at the DOC. His mechanical experience and 11 years at the facility have allowed him to seamlessly transition into this big role. Thank you so much for stepping up, Josh!

Wendy Fought was hired as the Drop-off Center (DOC) Manager in July. Coming from a background in education, ours was a whole new industry for her. However, Wendy brought extensive management experience and that has allowed her to rapidly build respect from the staff and become an effective leader at the DOC. She oversees all drivers and attendants and she has taken a deep dive into safety protocols throughout the facility. Wendy has held OSHA trainings for management and staff, prepared an Emergency Response Plan, and has greatly improved our safety culture. Welcome and thank you, Wendy!



New Assistant to Director

Ashley Bur was hired in June to fill the vacancy created by Andi Shepherd’s promotion. With background in sustainability, grant writing, and policy, she is a great addition for our department.

Her late-spring arrival meant she immediately took off managing our busy summer event-recycling schedule. Once summer started to wind down, Ashley proved her exceptional grant-writing skills, focusing on fund raising for our Mixed Container sort line upgrades. Ashley has been a valuable part of this team since day one, and we are happy to have her as part of our DPW Team. Go Ashley!





Cross Training Increased

The summer of 2019 saw more cross-training of employees. Nate Hopkins (above), Gatehouse/Transfer Station Attendant, obtained his commercial drivers' license, allowing him to substitute for our Curbside and Roll-off Drivers. Roger Duffiney (below), of Shipping and Receiving, trained as a Gatehouse/Transfer Station Attendant. With their additional skill sets, Nate and Roger have been invaluable to uninterrupted operations. Thank you, Roger and Nate!



New: Jon Zoerhof

Jon Zoerhof joined Emmet County's Curbside Drivers' Team on August 14, 2019. Jon brought a great deal of experience from his previous employment at Drost Landscape. Jon's routes include Alanson, Little Traverse West, Bear Creek West and Petoskey East and West. He also contributes to our zero-waste programs by picking up Food Scraps from Harbor Springs and Petoskey restaurants Tuesdays and Fridays. Welcome, Jon Z!



2019 Intern, Ethan Crane

Having just finished his freshman year at Aquinas College, Ethan Crane joined us full of fresh ideas regarding sustainability and was great with technology. For example, he got on-line Household Chemical Drop-off and Document Shredding appointments up and running using his experience with Google Forms and, fresh off a course in Excel, he created a spreadsheet for tracking the condition of our 150+ drop-site bins. Also, as most of our interns do, Ethan happily jumped into event recycling, washing bins, setting up events, and volunteering with us at Bliss Fest.



Thank you, Ethan!

Public Works Board 2019

Denny Keiser
Bear Creek Township Supervisor, Chairperson

William Dohm
Little Traverse Township Supervisor, Vice Chairperson

Doug Fuller
Member at Large, Secretary

Arden Bawkey
Emmet County Drain Commissioner

James Kargol
Emmet County Commissioner

Charlie MacInnis
Emmet County Commissioner

Bert Notestine
Emmet County Road Commission



Welcome, New Public Works Board Members

In 2019, we welcomed three new members to our Board of Directors:

Bert Notestine (above right)

The Road Commission appoints one member of our board. This term they appointed Bert Notestine. As a previous County Commissioner, Bert is familiar with our department and the county as a whole. He understands the great work that we do as a department and always encourages us to spread our success stories far and wide.

Doug Fuller (middle right)

Doug is our board's new Member at Large. He has years of experience as a volunteer with our programs and is a passionate recycler. Bringing knowledge from a long career in water protection, he spent a good part of the year helping us navigate options for managing our Transfer Station leachate water.

Jim Kargol (bottom right)

Jim is one of two current County Commissioners who serve on our board. Jim worked at the Road Commission for many years, so he understands a lot of the issues that we discuss including purchasing new trucks. Jim is also serving on our building committee, helping us with our MRF Upgrades.





Trillium are a northern Michigan spring symbol of renewal, growing up amongst the previous year's decaying leaves.

Vision and Mission Statements Formalized

In 2019 our new Drop-off Center and Safety Manager, Wendy Fought, led us in formalizing the Department of Public Works' mission and vision statements. The following are the results. Banners to share them with all of our staff and visitors were hung at the Pleasantview Road Drop-off Center and our administrative offices in the County Building.

Vision

To have systems that make best practices for waste reduction, recycling and disposal the northern Michigan way of life.

Mission

To provide opportunities and education for employees, residents, businesses and neighboring communities to reduce waste, reuse, recycle and properly dispose of materials in order to preserve the natural beauty of our northern Michigan community.

FINANCIAL SUMMARY

REVENUE

| | |
|-------------------------------|-----------------------|
| Waste Transfer Station | |
| Charges for Services | \$2,628,044.35 |
| Interest Income | \$28,505.91 |
| Clean Sweep Grant Funds | \$11,725.00 |
| Other Income* | \$24,443.71 |
| County General Fund | \$0.00 |
| SUBTOTAL | \$2,692,718.97 |

Recycling Program

| | |
|---------------------------------------|-----------------------|
| For-Fee Recyclables** | \$114,774.80 |
| Sale of Materials | \$542,400.52 |
| From Waste Revenues | \$313,779.22 |
| Out-of-County and Other Services..... | \$454,855.96 |
| Curbside Recycling..... | \$416,322.61 |
| Compost, Mulch & Bin Sales..... | \$38,397.00 |
| Other Income..... | \$41,619.77 |
| Grants | \$8,531.93 |
| County General Fund | \$0.00 |
| SUBTOTAL | \$1,930,681.81 |
| Total DPW Revenue..... | \$4,623,400.78 |

EXPENSES

| | |
|-----------------------------------|-----------------------|
| Waste Transfer Station | |
| Personnel..... | \$432,669.64 |
| Contractual Services..... | \$362,983.21 |
| Landfill Fees | \$1,340,842.70 |
| Operations | \$141,730.13 |
| Depreciation | \$232,932.00 |
| Principal & Interest Payment..... | \$31,625.84 |
| SUBTOTAL | \$2,552,783.52 |

Recycling Program

| | |
|---------------------------------|-----------------------|
| Personnel..... | \$844,199.93 |
| Contractual Services..... | \$645,330.00 |
| Revenue Sharing..... | \$8,978.92 |
| Operations*** | \$474,975.47 |
| Depreciation | \$259,560.00 |
| SUBTOTAL | \$2,223,044.32 |
| Total DPW Expenses | \$4,775,827.84 |

**Transfer Station "Other Income" includes monies from business and out-of-county users of the Household Chemical Drop-off (HCD) program and donations to the HCD program.*

***For-Fee Recyclables includes fees for 1) recycling of mattresses, paint, refrigerants, electronics, rubble, tires, and wood, 2) recycling of batteries and fluorescent bulbs from businesses, and 3) tipping of brush to be composted or chipped.*

****Operations includes Straits Area Services sort crew.*

Recycler of the Year

Recycling Award Winners Just Keep Increasing Sustainability

When David Meikle and Steve Steffes opened their first restaurant in Petoskey, Tap30, they immediately signed up for Emmet County Recycling’s (ECR) curbside collection service. When ECR piloted collection of food scraps and other compostables from businesses in 2015, Tap30 was one of the inaugural customers. And they haven’t stopped taking on new sustainability initiatives since!



The partners soon added Pour Kitchen and Bar one door west of Tap30 on Mitchell Street. Then Meikle and his wife Missy built The Back Lot, a bar “with food trucks” right behind Tap30 at 425 Michigan Street. Each step of the way, as their enterprises grew, the partners and their staff took action to minimize and recover wastes from the

businesses. For this proactive approach to reducing, reusing and recycling, the three restaurants and their owners have been named Emmet County Recycling’s 2019 Recycler of the Year Award winners.



Tap30 and Pour have continuously analyzed their waste and sought alternatives to prevent or recover waste. “We were just talking about how we are down to two ‘waste items’ left: adhesive napkin bands and take-out sauce cups. We are actively looking for better alternatives,” said the group’s marketing lead, Sandra Thomas.

“For David and his team, sustainability is not an afterthought,” said Lindsey Walker, ECR’s business outreach specialist. “They were thinking about these issues before they even implemented the businesses.”



The Back Lot, which the Meikle’s built from the ground up, offered even more opportunities for pre-planning. The Back Lot (TBL) is open year round, but especially



David Meikle and ECR’s Lindsey Walker show off one of the zero-waste compostable bins where The Back Lot’s customers can simply toss their utensils, boats and plates—all of which are carefully selected to be compostable—right in with any food scraps left over from their meal.

features a large beer garden which hosts food trucks in the warmer months. The Back Lot is a “zero-waste” business, reducing, reusing, recycling or composting over 90% of the waste they generate.

From the get go, the food trucks serving at The Back Lot have been required to use only compostable serviceware approved by Emmet County Recycling for composting at their Pleasantview Road Drop-off Center. Walker explained, “We have to be careful; there are plastic forks, knives and spoons on the market that claim to be compostable but that won’t break down in our piles!”

In building The Back Lot, the Meikles designed in room for recycling infrastructure—a must on the otherwise tight alley—and put in a cistern to store rainwater collected from the roof. The water will be used for their decorative plantings. “And I just got done meeting with a guy to get a quote to do solar on the roof. In the summer we should be able to generate all the electricity The Back Lot uses,” said David Meikle.

The staff of ECR asks everyone to help us thank the Tap30, Pour, and Back Lot teams for their sustainability efforts and to congratulate them on their Recycler of the Year Award win.





RECYCLING



Markets' Adjustments to Chinese Ban Continued to Dampen U.S. Recycling Revenues

Emmet County Recycling's (ECR) revenues from sale of recyclable materials—the top source of funding for the department's recycling system—reached a ten-year low in 2019, despite steady volume in recent years. Down from a high of over \$1,000,000 in 2011 and an average over the past decade of \$774,050, income from sale of recyclables in 2019 was a disappointing \$566,204.87.

Emmet County's frustrating number actually compared well with revenues of other programs. Increased supply—as north American recyclers who previously exported to China sold to domestic markets—drove market prices down throughout the United States. Due to our dual-stream system we produce many high quality materials which can supply a variety of manufacturers. And our persistence in seeking out and building relationships with local and regional markets helps us find and secure the best deals available.

Those relationships are largely the work of Emmet Recycling's Market Development specialist, Lindsey Walker. Lindsey's dynamism and outstanding networking resulted in an invitation to speak on a panel at the 2019 Resource Recycling Conference in New Orleans, Louisiana. The panel's speakers



In August, Business and Market Outreach staffer Lindsey Walker spoke on a panel at a national conference entitled, "Where Things Stand in Asia."

included representatives from leading national recycling organizations and the New York City Department of Sanitation. In her remarks, Walker called this a "man in the mirror" moment for U.S. recyclers. She also shared three lessons from Emmet County Recycling's experiences:

- Seek out local markets
- Build and maintain relationships with brokers and manufacturers
- Provide them good, clean commodities.

Market volatility comes with the territory when your business is providing commodities to manufacturers. ECR has weathered extremes before. Markets are expected to rebound to some degree and ultimately this shake up will likely make for a stronger U.S. recycling system in the long run. Many U.S. systems have taken steps to improve the quality of the commodities they produce and Chinese firms are building secondary processing plants in the US so they can continue to buy US recyclables but only export the purified materials.

In addition to belt tightening, ECR leaders will be exploring a variety of both revenue- and expense-based strategies to improve our budget outlook going forward.

Recycling Statistics 2019

| | |
|--|----------------|
| Total Volume | 11,506.82 tons |
| Revenue from Sales of Recyclables..... | \$566,204.87 |
| Curbside Pick Ups | 152,566 |
| Event Recycling Services (# of events) | 57 |

Emmet County's Mixed-Container Sort Line, shown here, was installed in 2009. Now it's set for a major upgrade.



Major Overhaul of Container Sort Line Awarded EGLE Grant, Contractors Selected

For several years now, we have been conducting studies with Resource Recycling Systems (RRS) and planning for upgrades to our Mixed Container sort line. As a dual stream MRF, we process our Paper, Boxes and Bags on one conveyor and our Mixed Containers on another. Our existing Mixed Containers line was purchased second hand, refurbished and installed in 2009. In addition to ordinary wear, it is in need of upgrading due to

- widespread labor shortages
- safety hazards
- inefficiency, and
- changes in consumer packaging,

This careful process reached a major milestone in August 2019 as we released a request for proposals for this project. Throughout the fall, we evaluated the bids and in November, we awarded the bid to Machinex and AMP Robotics.

This exciting project is well underway, with weekly meetings to review drawings and plans. The new Mixed-Container sort system is projected to be up and running by the end of 2020.

A huge part of this project has been fund raising for these upgrades. Although these improvements are expected to pay themselves off in just a handful of years, there is still a large up-front cost for this project. To help us make this great leap forward, the State of Michigan's Department of Environment, Great Lakes and Energy (EGLE) has awarded Emmet County Recycling an \$800,000 grant for this project and Closed Loop Partners is providing an interest-free loan of \$1,000,000.

How You Can Help

We have secured over 75% of the \$2,400,000 cost of our Mixed Container Line upgrade. However, the remaining amount is substantial: \$585,000. Please contact Emmet County DPW Director Andi Shepherd if you are aware of or represent a brand, foundation, association or other entity which might be interested in supporting our mission through this vital project.





**PLEASANTVIEW ROAD
DROP-OFF
CENTER**

PDOC Highlights

| | |
|---|--------------|
| Paid Transactions..... | 64,408 |
| Revenue from For-Fee Recyclables..... | \$114,774.80 |
| Revenue from Sales of Compost, Compost Bins, and Mulch | \$24,125.00 |



Fencing the area behind our shredder (green above) and surveillance cameras now allow ECR to secure documents for later shredding.

NEW: Drop Off Documents for Shredding Anytime

Customers can now drop off documents to be shredded anytime the Drop-off Center is open, thanks to a grant from the Michigan Municipal Risk Management Authority. The service was previously offered by appointment only. The grant covered Emmet Recycling’s costs to fence and gate the area beneath silos adjacent to the shredder (see picture above) and put that area under 24-hour surveillance. Customers who wish to witness the shredding of their documents can still shred by appointment.

The cost to have documents shredded (and then, of course, recycled) is \$6 per copy-paper box or equivalent.



ORGANICS

Organics by the Numbers

Emmet County’s food and yard-waste collection and composting programs continued to thrive in 2019. The food scraps collected in 2019 equalled nearly 60% of the total of the previous four years combined! Particularly popular was the option to make community events “zero waste” which is made possible by food scraps collection.

- From Commercial Customers, pounds.....561,282
- From Drop-off Center carts, pounds..... 24,738
- From Farmers Market carts, pounds.....6,642
- From Zero-Waste Events, pounds.....4,380
- Yards of compost sold 479
- Customer count, buying compost:436
(over half chose compost loaded by our staff: 274)



**WASTE
DISPOSAL**

New Safety Culture Efforts Kick Off

A facility-wide safety review, initiated by Drop-off Center Manager Wendy Fought and conducted by a third party administrator, yielded important improvements to Transfer Station operations. Along with increased signage in the drive-through bay to alert customers to hazards and additional personal protective gear for staff, Fought directed recycle processing staff to avoid walking through the Transfer Station bay on their way to and from the recycling buildings. Many more safety improvements are in the works for 2020.

Waste Statistics

| | |
|--|----------------|
| Waste Transferred to Elk Run Landfill..... | 119,487 yards |
| Transfer Station Revenue | \$2,513,783.23 |



HAZARDOUS WASTE MANAGEMENT



Refrigerant-containing appliances—including dehumidifiers, air conditioners, freezers, and refrigerators—at the Pleasantview Road Drop-off Center will have their refrigerant removed by a certified contractor before being recycled.

Refrigerant Recycling Fee Decreased

Emmet County Recycling has offered refrigerant-removal service since 2001 when we recognized that the legal requirement to have a licensed contractor remove refrigerants was a barrier to their proper handling. We recently learned that our service is even more important than we realized: improved refrigerant management was ranked the single most powerful solution to climate disruption. The ranking is based on the work of a coalition of hundreds of scientists, entrepreneurs, and advocates from across the globe contributing to Project Drawdown (ProjectDrawdown.org).

Refrigerants' surprisingly large impact as a greenhouse gases results from the fact that commonly used refrigerant chemicals have 1,000 to 9,000 times greater heat-holding capacity than carbon dioxide.

Charging a fee of \$25 per unit, in the past five years we have serviced 2,411 appliances through this program. As a first step to encourage more recycling of refrigerant-containing appliances, in 2019, we implemented a lower fee—\$15—for smaller items including air conditioners, dehumidifiers, and mini refrigerators.

To meet energy conservation requirements, electric utilities have been offering removal and recycling services for working refrigerant appliances and even paying customers for the appliances. There are several such utility programs in the area and we try to stay up to date on the details and share their information with our customers too.

Online Appointments

Our household chemical drop-off events are offered by appointment only. This is primarily to keep traffic from backing up on Pleasantview Road, but it also gives us a chance to educate customers and screen for businesses and residents of other counties.

In 2019 we began offering online appointment scheduling. This is a convenience for many customers and is saving us labor time on the phones. An added bonus is that “the appointment book” is accessible for use by multiple staff people at once, saving time hunting for the book and making return calls.

Hazardous Waste Volume

| | |
|--|---------|
| Oil Paint Recycled (pounds)..... | 27,080 |
| Latex Paint Recycled (pounds) | 58,800 |
| Hazardous Materials Collected on Drop-off Days (pounds) | 57,474 |
| Haz Mat Collected Year-Round (pounds) (Hazardous Recyclables Collection Area) | 117,740 |
| Total (pounds)..... | 261,094 |





EDUCATION



Battery Fire Prevention Campaign Ramped Up

Emmet County Recycling began accepting batteries our first year, 1990, due to the mercury then common in batteries. While mercury is no longer used in most batteries, the danger of battery fires has increased in tandem with the dramatic growth in battery types and uses since the 1990s. Accordingly, the U.S. Department of Transportation now requires many batteries' terminals to be protected in transport. In 2019 Emmet County Recycling (ECR) launched a public education campaign about battery fire prevention.

The campaign uses fiery imagery and to-date has included information on our website (highlighted by a home-page slide) and posts on social media. As 2019 wrapped up, flyers and rack cards were being distributed at the Pleasantview Drop-off Center in the batteries collection area (with a taping station available to customers) and at stores and offices which host ECR battery collection buckets.

Our message to customers is that taping battery terminals is the law *and* the smart thing to do with loose batteries for the safety of homes and businesses as well.



ECDPW Director Andi Shepberd high fives Nyla P. Lastic, plastics recycling educator for EGLE's statewide "Know It Before You Throw It" campaign. The two made appearances at a launch event.

EGLE's Recycling Raccoon Squad To Improve Quality

Raccoons have been enlisted to help the Michigan Department of Energy, Great Lakes and Environment (EGLE) better inform Michiganders on what can—and cannot—be recycled and how to recycle correctly. Under contract with EGLE, GÜD Marketing in Lansing developed the campaign tag line, "Know It Before You Throw It," to encourage residents to learn what their local programs take and major problem materials to avoid. The crew of trained raccoons who bring the message to life are from Georgia.

Upon launch of the campaign in July, ECR immediately began sharing their social media posts and using the materials in our enewsletter, but our involvement with the campaign began much earlier. ECR communications coordinator Kate Melby and former director Elisa Seltzer were among state recycling leaders interviewed by GÜD in determining priorities and messages for the state's campaign. Director Andi Shepberd represented the tip of the mitt's recycling programs at a July kick-off press conference in Traverse City.

Visit RecyclingRaccoons.org to join in the fun. We are excited to see what comes next!

Emmet County Department of Public Works

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