Let's Talk Trash

August 2018 Edition

August 2018 What's Inside

Interview of Braden Belliveau:
<u>A New York Boy in New Mexico 1</u>
A Freek Idee.
<u>A Fresh Idea:</u>
Recycling Food Wastes2
2018 New Mexico Solid Waste &
<u>Recycling Conference: Local Actions</u>
for Global Markets3
2018 NM SWANA Road-E-O
Competition Results4
August 7, 2018 E-Session
Training Summary5
Save the Dates!5

published by SOLID WASTE ASSOCIATION OF NORTH AMERICA, NEW MEXICO ROADRUNNER CHAPTER

6110 Bellamah Ave NE Albuquerque, NM 87110

505.363.4795 <u>www.nmswana.com</u>

Interview of Braden Belliveau: A New York Boy in New Mexico by Jack Chappelle, Engineering Solutions & Design, Inc.

One of the most interesting aspects of interviewing people for the newsletter is to discover what makes each interviewee unique. I'm interviewing Braden Belliveau for this newsletter issue. Braden holds the distinction of being the youngest person I can recall interviewing. Given his youth and the need for the chapter to skew younger, I have decided to go easy on Braden.

Braden was born in Amherst, New York and raised in Gasport, New York. The distance between the two communities is approximately 24 miles or as we say in New Mexico, a good start. He attended Gasport Elementary School and Royalton Hartland Central High School. (As a side note, the purple and white Rams won the district title for baseball this year.)It was during these formative years when Braden first found gainful employment. He delivered newspapers for the Union Sun & Journal. Braden took to the newspaper business in the spring and summer but realized that winters in upstate New York tend to be very cold and the wind blows from all directions. Braden was also introduced to the bad side of an Australian Terrier during his winter delivery stint. To this day he still holds a bit of a grudge toward a particular Australian Terrier. I don't think he feels the same toward the country.

After high school Braden attended Niagara County Community College, which in itself is much better sounding than the community college I attended.



With Associate Degrees in Mathematics and Science, Braden moved on to the University of Buffalo where he graduated in May 2016 with a Bachelor's Degree in Environmental Engineering.

While at the University of Buffalo, Braden's life and his future success at Gordon Environmental were cemented when he met Keith Gordon's niece Kathleen. Braden and Kathleen were both working in the tutoring center at the university. This happenstance led Braden to two summer internships at Gordon Environmental.

Braden's internships with Gordon Environmental were so enjoyable that when he graduated he jumped at the opportunity of a full-time gig. Braden is an Environmental Engineer with the firm and has had the opportunity to be involved in a variety of projects. One particular project has stuck with him. While conducting construction quality assurance oversight in Eunice,

continued on page 2

Volume 18, No. 2

Braden Belliveau (continued from page 1)

New Mexico, he witnessed the bubbling effect that 30-mile-per-hour cross winds have on plastic liners. The effort to settle the liner down was a significant challenge and was completed safely.

Braden has been a member of SWANA since October 2017. He has met a wide variety of interesting people within New Mexico's solid waste industry since joining SWANA. He feels that SWANA is a great way to learn about trends in the solid waste industry as well as the new technologies and regulations driving those trends.

Braden's career is just starting but his interest in the solid waste industry and his commitment to active membership in New Mexico's SWANA Chapter reveals his focus and willingness to take advantage of all the opportunities that come his way. I appreciate Braden's youth and enthusiasm and wish him all the best.



2018 ROAD-E-O RESULTS ON P. 4

A Fresh Idea: Recycling Food Wastes by Stephen Miceli, Waste Management of New Mexico

The U.S produces over 34 million tons of food waste each year. Only 3% of this waste is diverted from landfills leaving 32 million tons of recycling opportunity buried in the ground. So, what can we do about this? Well, there are many options ranging from anaerobic digestion, home and commercial composting, in-vessel composting, and livestock feed programs. With so many options, why are we only diverting 3% of our food waste? Shouldn't someone, anyone, do something about this? Well, there is one person who decided to do something about it.



At the April 17, 2018 NM SWANA Regional Roundtable meeting held at the Range Café in Bernalillo, NM, Ms. Elena, Kayak, Energy/Environmental Specialist at Rio Rancho Public Schools (RRPS), told us all about her efforts on diverting cafeteria food wastes from several schools in Rio Rancho. Elena enthralled her audience with her presentation titled: "NM Public Schools Can Divert Organic Resources From Local Landfills: A Validation Project", an amazing story of organics recycling that is inspiring young children to recycle and prove that organics recycling in school systems can be a successful venture.

The program Elena created, aptly named FRIEND (Food Recovery In Excellent New Directions), focused on diversion of uneaten foods in school cafeterias. Essentially, kids were taught what food items were recyclable, and, with the help of some dedicated food staff, the



kids separated trash from recyclable organics in a series of waste containers (see examples in picture at left). Although it took some time to get fully acquainted with the process, both the kids and the staff fully embraced the program, and took ownership in their part of the recycling loop. Once the food wastes were properly separated, they started their journey to a couple different destinations.

The food wastes that were uncontaminated (e.g., untouched fruits, sealed products, and unopened milk cartons—see above picture), were donated to needy families and food programs. Considering that one in four children in New Mexico struggle with hunger, these donations have been a valuable resource to ensure these children are receiving additional nutritious products.

The remaining food items were containerized and picked up by Galloping Grace Youth Ranch (GGYR) for use as livestock feed and composting material. GGYR, dedicated to helping kids learn in a sustainable family/ranch environment, also teaches kids how to raise livestock, grow crops, explore the outdoors, and enrich the community. The food wastes provided by the RRPS FRIENDS program, was instrumental in showing how food discards could be used as a resource to feed livestock (see

continued on page 3

Page 3 – August 2018 Edition

Let's Talk Trash

Volume 18, No. 2

A Fresh Idea (continued from page 2)

example picture below), resulting in the production of a new resource to complete the recycling loop.

In total, one preschool, ten elementary schools, four middle schools, two comprehensive high schools, and two alternative schools in Rio Rancho participated in the program. During the duration of the 3-year FRIEND Program, RRPS achieved the following food waste diversion rates:

School Year	Tons of Food Wastes Diverted
2014-2015	18.7
2015-2016	31.2
2016-2017	40

Because of the incredible efforts of Elena Kayak, the RRPS staff, GGYR, and our amazing children, Elena and GGYR were recognized by the New Mexico Recycling Coalition and the NM Chapter of the Solid Waste Association of North America. Elena received the award for Recycler of the Year, and GGYR received the award for Diversion Project of the Year.

After Elena's presentation, attendees had a wonderfully tasty lunch provided by the Range Café, which was followed by a lively discussion on how to continue fostering organics recycling projects such as the RRPS FRIEND Program, and prospects for other food waste composting programs. Walter Dods, of Soilutions, provided very valuable insight into the organics composting process as well as his thoughts on home composting.

A very special thanks is given to Elena, and to Walter for opening us up to the world of organics recycling and the many opportunities for utilizing food wastes as a resource. We also appreciate all attendees' participation and discussion, as this truly made the Roundtable Meeting a complete success.



2018 New Mexico Solid Waste & Recycling Conference: Local Actions for Global Markets by Charles W. Fiedler, Associate/Senior Practice Leader, Gordon Environmental/PSC

he New Mexico Solid Waste & Recycling Conference will he held from September 24-26, 2018 at the Albuquerque Marriott Uptown. The Conference is being jointly hosted by the New Mexico SWANA Roadrunner Chapter and the New Mexico Recycling Coalition.

This is the "MUST ATTEND" event that anybody who is anybody in the New Mexico solid waste or recycling business will be attending. This bi-annual event will provide the only opportunity in the next two years to meet and interact with all the other solid waste and recycling professionals from across the state right here in Albuquerque. The conference is close to home with numerous opportunities to interact with your peers to learn what is happening within New Mexico relative to these critical industries. We have a great line-up of speakers and topics. See the program at a glance <u>HERE</u>.

Registration is now open, and you can Click <u>HERE</u> to start your registration.



2018 NM SWANA Road-E-O Competition Results

by Shirlene Sitton, City of Santa Fe Environmental Services Division

On June 16, 2018, seventeen professional drivers and equipment operators working in solid waste and recycling operations from around New Mexico participated in the 2018 Solid Waste Road-E-O competition. This year's event took place at the Caja Del Rio Landfill in Santa Fe. The Solid Waste Association of North America (SWANA) designs and strictly manages these competitions in every state to promote safety and foster professionalism in the solid waste industry.

Employees are given a chance to show off their years of skills and experience in operating specialized machines during the competition. Drivers test their abilities in an obstacle-style course, such as navigating off-sets, parallel parking, backing up in tight spaces and around barrels, and stopping close to barriers without hitting them. Collection vehicle drivers competed for points in each of the skill areas for both front-load trucks (ones that collect dumpsters) or automated sideload trucks (ones that collect residential carts), as well as for the lowest overall time required to complete the course. Heavy equipment operators competed on a separate course that mimicked the challenges of navigating and maneuvering at landfills.

"Our drivers and operators work hard every day to ensure the health and safety of our residents. This event is all for them, to show our appreciation for what they do, and let them show off their high level of skill and professionalism," said Shirlene Sitton of the City of Santa Fe Environmental Services Division. "They get to meet their colleagues from around the State, learn best practices from each other, and hopefully have a great time!" A celebratory barbeque lunch and presentation of awards for the winners followed the Road-E-O competition. Generous sponsors representing the solid waste and recycling industries ensured a special event for the participants.

The collection vehicle driver and landfill equipment operator with the highest scores will represent the state of NM at the 2018 SWANA International Road-E-O Competition. This year's international event will take place on September 22, 2018 at Denver International Airport. Of the seventeen (17) participants from Albuquerque, Santa Fe, and Farmington, the 2018 NM SWANA NM Road-E-O winners are:



1st Place Landfill Compactor and Dozer Brian Johnson – Waste Management of New Mexico

LANDFILL COMPACTOR:

- 1st Place: Brian Johnson Waste Management of New Mexico
- 2nd Place: Chris Jamarillo City of Albuquerque Solid Waste Management
- 3rd Place: Roger Saiz- City of Albuquerque Solid Waste Management



2nd Place Landfill Compactor and Dozer Chris Jamarillo – City of Albuquerque Solid Waste Management



3rd Place Landfill Compactor and Dozer Roger Saiz- City of Albuquerque Solid Waste Management

LANDFILL BULLDOZER (DOZER):

- 1st Place: Brian Johnson Waste Management of New Mexico
- 2nd Place: Chris Jamarillo City of Albuquerque Solid Waste Management3rd Place: Roger Saiz- City of Albuquerque

Solid Waste Management



1st Place Front Loader Albert Valdez – City of Santa Fe Environmental Services Division TRASH TRUCK (FRONT LOADER):

- 1st Place: Albert Valdez City of Santa Fe Environmental Services Division
- 2nd Place: Mario Moreno City of Albuquerque Solid Waste Management
- 3rd Place: Derek Whiten City of Albuquerque Solid Waste Management



2nd Place Front Loader Mario Moreno – City of Albuquerque Solid Waste Management

<u>continued on page 5</u>

August 7, 2018 E-Session Training Summary by Jerry Kamieniecki, Consultant

he New Mexico Roadrunner Chapter of SWANA (NM SWANA) held an electronic training session on August 7, 2018 at the City of Albuquerque's Open Space Visitor Center. The E-Session was titled "Tacoma Solid Waste Management Recovery & Transfer Center". The presentation was given by Mr. Lewis T. Griffith, Assistant Division Manager, Environmental Services Solid Waste Management, Tacoma WA, and Ms. Debra Frye, Senior Vice President, HDR Engineering, MO. The E-Session was based on a previous presentation Mr. Griffith and Ms. Frey gave to a live internet audience on March 19, 2014. The thirteen attendees at the Albuquerque event viewed and listened to the recorded presentation and discussed the information further after the presentation concluded. Attendees at the E-Session were also provided lunch, beverages, and a printed copy of the presentation slides.

Mr. Griffith provided an overview of the 190-acre City of Tacoma Landfill, which began operations in the 1960's. During the mid-2000's, the City of Tacoma recognized the declining airspace available for disposal; therefore, the City began evaluating alternatives for managing waste in the Tacoma area. To encourage input from the local community, the City held several public workshops to share information and exchange ideas regarding:

- Converting use of the landfill site into a Transfer Center that would manage municipal solid waste (MSW) and recyclables
- Traffic patterns for both commercial and residential traffic
- Building a new materials handling facility over existing waste deposits
- Ability of the new facility to provide flexibility regarding the waste types and amount of material managed

Using information obtained from several interactive public workshops, the City of Tacoma decided to pursue the building and operation of a Transfer Center at the existing landfill site. However, prior to the design and construction of the Transfer Center, both structural and environmental issues needed to be addressed. For example, design of the Transfer Center building was preceded by an evaluation of structural considerations before constructing a building (and adjacent access roads) over waste. To support the weight of the building, both driven and auger piles were considered.

continued on page 6

The NM SWANA Chapter wishes to thank the Santa Fe Solid Waste Management Agency/Caja del Rio Landfill for serving as gracious hosts for this competition. The Chapter would also like to thank the following seven sponsors for providing financial support for the Road-E-O event.

GOLD SPONSORS	SILVER SPONSORS	BRONZE SPONSERS
GORDON PSC ENVIRONMENTAL IRUSH IRUCK CENTERS		NewGen Strategies & Solutions
WASTE MANAGEMENT	B RUBICON	

2018 ROAD-E-O (continued from page 4)



3rd Place Front Loader Derek Whiten – City of Albuquerque Solid Waste Management TRASH TRUCK (AUTOMATED SIDE LOADER):

- 1st Place: Efriam Cordova City of Santa Fe Environmental Services Division
- 2nd Place: Derek Whiten City of Albuquerque Solid Waste Management
- 3rd Place: Mike Martinez City of Albuquerque Solid Waste Management



Ist Place Side Loader Efriam Cordova – City of Santa Fe Environmental Services Division



2nd Place Side Loader Derek Whiten – City of Albuquerque Solid Waste Management



3rd Place Side Loader Mike Martinez – City of Albuquerque Solid Waste Management

August 7, 2018 E-Session Training Summary (continued from page 5)

Ultimately, driven piles were selected, and a total of 320 piles (consisting of 14-inch diameter steel) were installed. Another design consideration included the management of landfill gas (LFG), resulting in a final design that specified installation of a geomembrane liner and passive LFG collection system piping under the building.

Using information obtained from earlier on-site waste characterization studies, the City and its technical consultant, HDR Engineering, designed a new Transfer Center whose main building would feature a generous 75,000 square foot tipping floor. The tipping floor was designed to be entirely level, which maximized flexibility for traffic management and materials handling.

As part of building's design, both skylights (ceiling) and translucent panels (walls) were specified, reducing electricity costs for lighting. The building's roof was also designed to collect stormwater, some of which was routed to help to flush toilets. The building's roof was also outfitted with an array of solar panels. Due these innovative features (as well as the Transfer Center's other capabilities), the Tacoma Solid Waste Management Recovery & Transfer Center was awarded LEED Gold Certification, as well as the 2013 SWANA Gold Excellence Award for Transfer Station.

To facilitate the collection of recyclable materials, multiple wheeled containers were positioned along the indoor walls of the building and were moved by facility staff to help service deliveries with a high percentage of cardboard. Since the handling of cardboard was labor intensive, the City purchased a cardboard baler. The addition of the baler resulted in a better use of the tipping floor, and the City earned more revenue per pound by selling the baled (rather than loose) cardboard. Baling of cardboard also helped consolidate the material being handled inside the building. The baled cardboard also helped reduce transportation costs.

To manage bulky material more easily, the City purchased a material handler (a type of portable grappler). This equipment was effective for separating and moving bulky items on the tipping floor. Among the bulky items handled were large metal discards and clean wood waste, both of which were diverted to interested vendors. The City estimated that in its first year of operation, the material handler saved approximately \$35,000 due to avoided hauling and disposal costs.

SAVE THE DATES!

September 11-14, 2018 Landfill Operator Certification Course, Carlsbad, NM <u>nmswana.com/event/landfill-operator-certification-course-in-carlsbad</u>

September 25-26, 2018 NM SWANA and NMRC Joint Conference •Albuquerque Marriott Hotel <u>recyclenewmexico.com/conference</u>

> October 11, 2018 Regional Roundtable, Socorro, NM (Watch for Registration Details)

November 6-8, 2018 Transfer Operator Certification Course, Truth or Consequences, NM <u>nmswana.com/event/transfer-station-operator-certification-course-in-t-or-c</u>

December 7, 2018 Annual Meeting & Regional Roundtable Discussion, Embassy Suites Hotel (Watch for Registration Details)