

2015

Larimer County Solid Waste Department Annual Report

LANDFILL | HAZ WASTE | EDUCATION | ENVIRONMENTAL CARE | TRANSFER STATIONS



Updates in 2015

Solid Waste had another great year. This past year we had over a million cubic yards of trash disposed of and over 39,000 tons of materials recycled. Our recycling center has now been in operation since 1993. The Recycle Center in and out scales were replaced and operational in January of 2015. Planning for replacement of aging infrastructure is just one of the many things that has to be considered when providing solid waste and recycling services. There is an expectation that the services are maintained and continually offered.



New in/out scales at the Recycle Center.

Gate Improvements

Traffic lines have been an issue. We now have four gates available for our customers. One of the gates is now an “automatic gate.” This gate uses RFID tags to identify vehicles so that our large commercial customers can be detoured away from the two main gates. Hopefully, this will help shrink the lines to increase safety and diminish customer wait times at the landfill.

New Water Truck

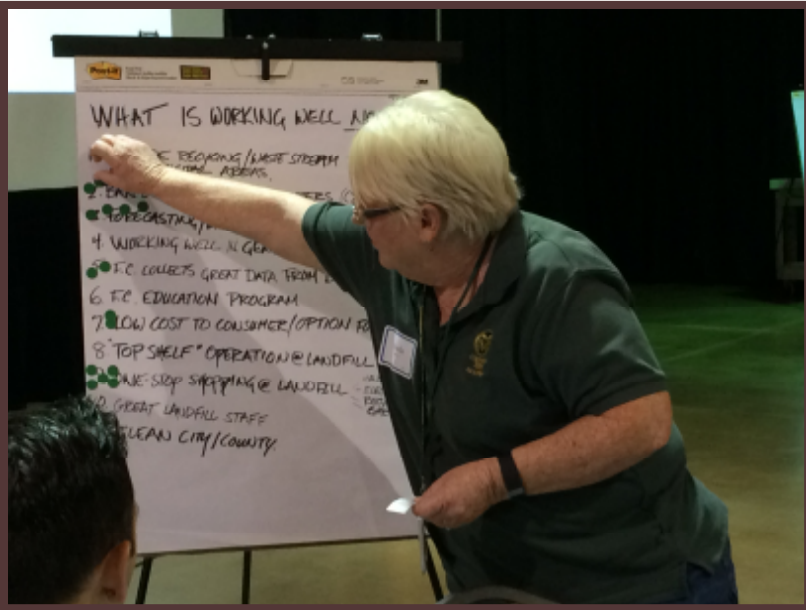
We received a new 4000-gallon water truck in August. The old water truck was 20+ years old with a 3,000 gallon capacity, handed down from Road & Bridge many years ago. One of the features of the new truck is a water cannon that is operated from inside the cab. Water can be sprayed up to 75 feet from the truck. The water is used to mitigate the dust during the dry months in heavy traffic periods.



Replacement Compactor

The Larimer County Landfill purchased a new Caterpillar 836 compactor and replaced the 825 Al Jon compactor. We have one 825 Al Jon on-site that we still use. There is a big difference in the size of the two machines. The Caterpillar 836 is about 8 tons heavier than the 825 Al Jon, which gives us better compaction. Better compaction extends the life of the landfill.

Collaborating with our partners



The biggest challenge facing Solid Waste is what is “next.” The current landfill has been taking in trash since 1963. At some point, a decision will have to be made on what we will do in the future. In April of 2015, the Solid Waste departments of Larimer County, Fort Collins, Loveland, and Estes Park formed the North Front Range Wasteshed Coalition.

Determining the future of Solid Waste

The Front Range Wasteshed Coalition hosted about 60 citizens and various businesses at The Ranch in October to look at where we are now and where we might be going with solid waste management. The current landfill only has about 10 more years of life. Stakeholders met in small groups to share their thoughts, knowledge, and wishes for solid waste management. This information is being used by the North Front Range Wasteshed Coalition to collaborate about the future of solid waste management. This process will probably take 3-4 years and involve community forums, sharing of information, and the gathering of data about waste management strategies for our community. Stay tuned. You can go to the Wasteshed website at: <http://larimer.org/wasteshed/>



What does it all mean?

Daily cover:

A cover of 6-12 inches of dirt that is packed over the trash at the end of each working day at a sanitary landfill. Daily cover helps keep odors down, pests away, prevents fires, keeps trash from blowing, and prevents moisture from trickling through the trash, which can pollute the groundwater below.

Dual stream recycling:

A recycling process in which cans and bottles (one stream) are collected separately from paper products (the other stream), compared to single stream where materials are all mixed together with no sorting.

Dump:

An unregulated place where trash is dumped and the surrounding environment is not protected nor monitored. Dumps used to be common, but are now illegal in the United States.

Household hazardous waste (HHW):

Dangerous (usually chemical) discarded products that may be toxic, corrosive, reactive, or an irritant. Examples include paint, pesticides, antifreeze, bleach, etc. HHW should never be thrown away in the trash because it can contaminate the environment.

Leachate collection system:

An underground system of pipes used to collect leachate and prevent it from getting into the groundwater

Liner:

A liner that keeps landfill trash from leaking into the groundwater below

Methane gas:

A potentially harmful gas released from landfills as trash decomposes. If gases are not vented, they can cause underground explosions or fire. Methane gas is considered a greenhouse gas, one that collects in the earth's atmosphere and traps heat within the atmosphere.

MRF (pronounced "murf"):

Materials Recovery Facility is a place where recyclables are sorted, processed, and shipped out to be made into new materials, commonly known as a recycling center.

Sanitary landfill:

A landfill that follows environmental rules set by the federal government including an underground liner, leachate collection, methane venting, and daily cover

Tipping fees:

Fees charged to dump trash at landfills and waste transfer stations

Transfer station:

A place, often in a rural area, where trash is temporarily collected and then periodically transported to a landfill or incinerator

Zero Waste:

A goal that, if met, would result in very little waste being created; instead, people would find ways to reduce the amount of materials used in the first place and to reuse or recycle worn or unwanted materials. Zero Waste principles also apply to hazardous wastes, by eliminating or reducing the use of hazardous materials in products.

Environmentally Speaking

According to an old adage, “The only thing constant in life is change,” and this seems to hold true with respect to environmental compliance at the landfill. We must constantly adapt to changes in business, state, and federal regulations and environmental conditions as we strive to minimize the landfill’s impact on the environment. We saw changes in all three of these areas in 2015.

There was a large increase in residential customers and a small decrease in commercial customers, resulting in a net increase in total customers and an increase in the amount of degradable waste buried in the landfill. With more customers, there is more vehicle traffic, which requires more watering to control dust on the gravel road that leads up to the landfill tipping area. To adapt to this increase in demand for dust control, we purchased a new, larger water truck and constructed a new filling station, incorporating a 12,000-gallon storage tank so the water truck can be filled quickly at any time of year. The increase in degradable waste is an issue because the landfill’s air emissions permit limits the amount that can be accepted in a 12-month period. To accommodate the increase, Larimer County has requested a revision of the air permit.

With respect to environmental conditions, the most notable change has been above-average precipitation for the last three years. Drought conditions over the last decade caused the water table to drop dramatically until the flood of September 2013, which marked a turning point. In the two years since the flood, the Fort Collins area has received above-average moisture, resulting in significant recharge of the local surficial aquifers, and the water table around the landfill has reached levels not seen since 1999. This has already caused Fossil Creek to start flowing again, but the effect on groundwater quality remains to be seen. We continue to monitor groundwater and surface water around the landfill to detect any changes.



A new 12,000 gallon underground water tank was installed last year.



Construction of new water filling station for dust mitigation took place in 2015.

Educating about the “Three R’s”

Visitors of all ages enjoy coming to the Garbage Garage Education Center! There they can learn about how to **Reduce** waste, **Reuse** all kinds of items, the benefits of **Recycling**.

School groups, preschoolers, senior adults, individuals, and families can schedule a guided tour that may include a visit to the Garbage Garage, as well as the recycling receiving facility and the landfill. Or, they can learn through hands-on activities how to keep our waterways clean, how to reduce household hazardous materials from their homes, create trash art, and learn while having fun with “Reuse Olympics” in the summer. Tours can be scheduled for groups. Families and individuals of all ages are invited to drop in during our new expanded hours of Tuesday, Wednesday, Thursday, or Friday from 10 a.m. to 2 p.m. Knowledgeable and dedicated staff is on hand during those hours. Classes, special events, and outreach are regularly scheduled to enhance the learning experience.

For more information about tours and to be placed on the mailing list, call 970-498-5772.



Make-it-yourself games excite even the youngest of visitors.



Educator Mary Sue leads a group of participants as they learn more about the plants and animals that call the landfill home.

Garbage Garage

new expanded hours:

Tuesday 10-2pm

Wednesday 10-2pm

Thursday 10-2pm

Friday 10-2pm

For information on
tours, classes, special
events, and outreach:

(970) 498-5772

Reducing wait times for safety

Construction of Gate 4

A new scale was installed at Gate House 4, which took approximately 6 months to complete. The new scale is mainly for our customers that have the RFID (Radio Frequency Identification) stickers. This allows RFID customers to use the scale without having a gate house attendant in the scale house. In our busier months, we will have an attendant in the gate house to serve all customers and help keep our wait times down and increase line safety.

When installation was complete, our busy season was nearly over. Using it during this trial period has worked really well. The real test will be this summer when customer numbers go way up.



Empowering Employees

We have a diversely talented staff at Solid Waste that is always encouraged to step up and utilize their strengths and talents to create a better work environment and a better customer experience. This principle is expressed in many areas, allowing employees to creatively offer their not-so-well-known talents for the betterment of the department and citizens that we serve.

Utilizing these talents and thinking creatively have saved the department time and money while simultaneously making a more fulfilling place to work.

The scale we received was too big for the space. Here you see it being cut to size.



One of our heavy equipment operators offers his welding talent to shorten a piece of iron to fit our space.



Laborers load discarded tires into a truck for shipment to a waste tire processor.

New Tire Regulations

New state regulations went into effect July 1, 2015, that significantly changed the way waste tires are managed in Colorado. While previous regulations banned landfill disposal of residential motor vehicles, the new rules ban all types of tires, including commercial vehicle tires, farm and heavy equipment tires, wheelbarrow tires, and even bicycle tires.

All tires collected at the landfill must now be shipped off-site to be salvaged or processed into re-derived fuel or other products.

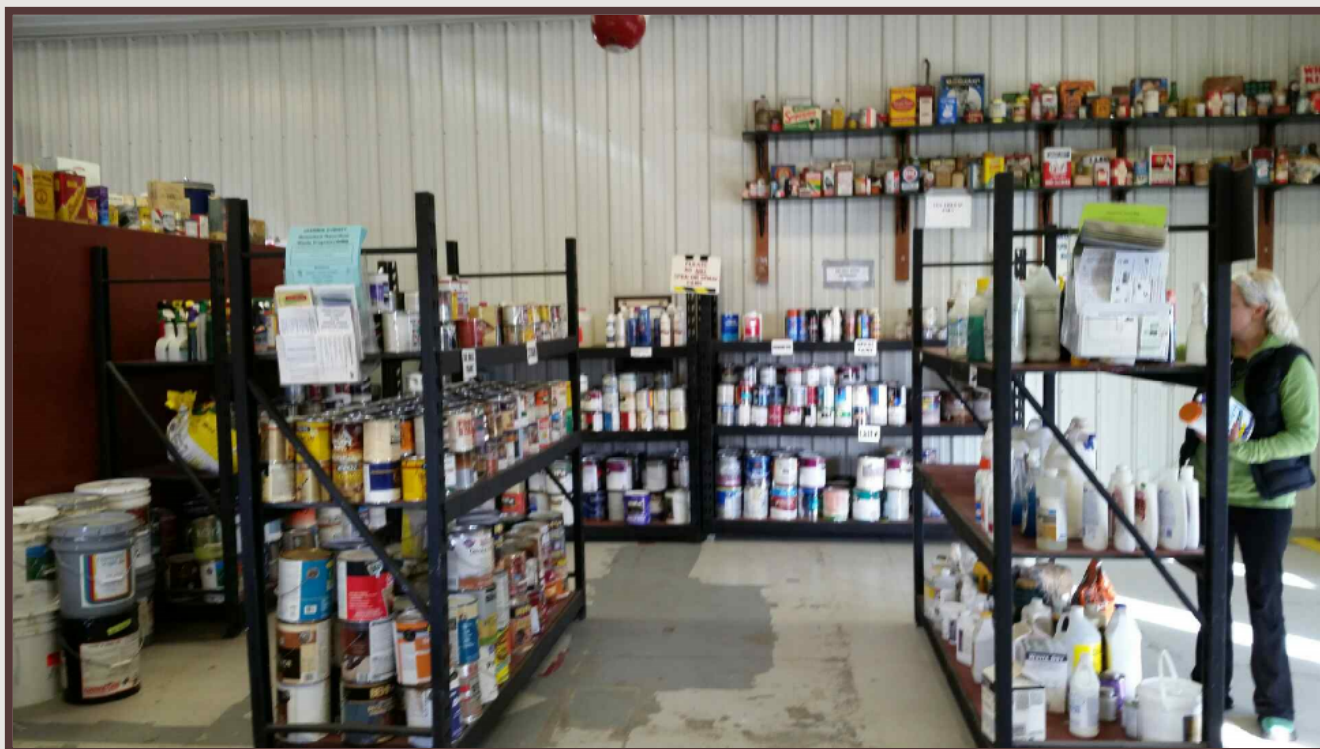
Since the new regulations went into effect, processors have been scrambling to find uses for the 6 million waste tires generated in Colorado each year.

Hazardous Waste Handling

The Household Hazardous Waste Facility continues to be a vital piece of landfill compliance. We are working hard to make changes that promote positive stewardship and customer service.



Our new electronic forms not only save paper, but help keep up with the changes in how the County saves records and facilitates how we document the waste that is diverted from the landfill.



Arranging and adding shelves, moving counters, and enlarging the shopping area to accommodate a growing program were necessary improvements.

Tools of the Trade

The Larimer County Landfill uses lots of different kinds of equipment to operate and maintain the landfill. Below are pictures of the equipment we use. Also listed are the names and descriptions some of these pieces of equipment.



Grader - Keeps our landfill roads in good shape. Also helps keep the "working face" — the area where the trash is being dumped that day — smooth and in good shape for all the garbage trucks and others that come use the landfill.



Compactor - Runs back and forth over the trash all day, smashing it down ("compacting" it) into a thin, even layer. This helps us save space at the landfill.



Bulldozer - Keeps trash within the working face boundaries, so that it doesn't spread all over the place.



Water Truck - Controls dust during the dry months and periods of heavy traffic



Scraper - Collects dirt from other parts of the landfill property and unloads it near the working face to be used as daily cover.



Slurry Truck - Spray a different form of daily cover over the trash. It sprays what's called "alternative daily cover," a material made from recycled newspapers. We use the alternative daily cover several days a week instead of the dirt cover. It serves the same purpose as the dirt, but we don't have to use as much of it, so it helps us save landfill space.



Track Loader - Spreads dirt over the trash at the end of the day. This dirt cover (called "daily cover") helps keep trash from getting blown by the wind, controls odors, keeps rats and birds away, and prevents fires. The track loader is also used to separate large items, such as refrigerators or big tree trunks, from the rest of the trash. (These items are managed differently.)



**NEW AND IMPROVED
IN 2015**



**Solid Waste Department
FAST Facts**

We receive **ZERO** tax dollars!



We have 7 major service areas:

- *Sanitary Landfill
- *Hazardous Waste
- *Environmental Compliance
- *Education
- *Transfer Stations
- *Recycling
- *Support Services

Larimer County Vision Statement

Larimer County will add value to the lives of its citizens by:

- Being good stewards of public resources
- Promoting innovation and continuous improvement
 - Providing quality customer service
 - Empowering people to take responsibility
 - Cultivating partnerships
- Being a fulfilling and enjoyable place to work



EDUCATING THE GENERATIONS

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Monday - Friday

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Engineering

Natural Resources

Road and Bridge

Solid Waste

The Ranch



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Hazardous Waste

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Education Center

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Ft Collins, CO 80526
970-498-5772

Berthoud Transfer

Hwy.56 & County Line
Berthoud, CO 80513
970-498-5771

Wellington Transfer

Owl Canyon Rd.
Wellington, CO 80549
970-498-5771

Red Feather Transfer

West of Parvin Lake
Red Feather, CO 80565
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