



SOLID WASTE SPECIAL SERVICE DISTRICT #1

2019
ANNUAL
REPORT

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REDUCE. REUSE. RECYCLE.

BACKGROUND

Our mission is to manage waste in Grand County to ensure public health, safety, and welfare in a manner that promotes zero waste.

The Solid Waste Special Service District #1 (the District) was established by the Grand County Council in 1993 for the purposes of:

- Constructing, maintaining, and operating a sanitary landfill facility for the disposal of solid waste generated by residents and businesses of Grand County, Utah;
- To operate a recycling program in Grand County, Utah; and
- To otherwise manage solid waste.

The District manages the operations of the Klondike Landfill, Moab Landfill, and the Community Recycle Center. The District operates under an Enterprise Fund, meaning that we are funded primarily through the services we provide, including the sale of recycled goods and landfill tipping fees (~80%). The District also receives funds allocated by Grand County, including Transient Room Tax, Mineral Lease Funds, and PILT Monies (~20%) to help offset infrastructure and operational costs as they relate to the impacts of tourism and development.

The District is governed by a five-person Administrative Control Board consisting of representatives from the Grand County Council, Moab City Council, the Town of Castle Valley, and two volunteer At-Large Members that live in Grand County, Utah.

LETTER FROM THE DISTRICT MANAGER

Thank you for downloading the District's 2019 Annual Report. The District facilitated numerous accomplishments in 2019, which are highlighted in this report. We enhanced our staff and spearheaded light years of improvements at all of our operations. Although historical operational deficiencies have created long-term challenges that we will be faced with for many years, the District is excited to tackle these challenges while simultaneously creating new and enhanced waste diversion opportunities for our community that support the protection of human health and the environment.

The District strongly believes in the integrated solid waste management philosophies of reduce, reuse, and recycle. As District Manager, I am dedicated to facilitating continuous improvements at all of our operations, including waste diversion programs, public education and outreach, community involvement and collaboration, and building effective public and private partnerships. The District encourages all residents and businesses to get involved with the organization and is always open to fresh ideas and constructive feedback. Please contact us with any comments or ideas on how we can continually improve our facilities and community impacts.

Sincerely,

Evan Tyrrell, CHMM
District Manager
Solid Waste Special Service District #1

ADMINISTRATIVE CONTROL BOARD

Chair/City of Moab Representative - Kalen Jones

Vice Chair - Kevin Fitzgerald

Treasurer/Grand County Council Representative - Mary McGann

Member At-Large - Chad Harris

Castle Valley Representative - Pam Hackley/Vacant



District staff with retired Board member, Pam Hackley, and the upgraded baler at the CRC (purchased in 2019).

CRC CHANGES

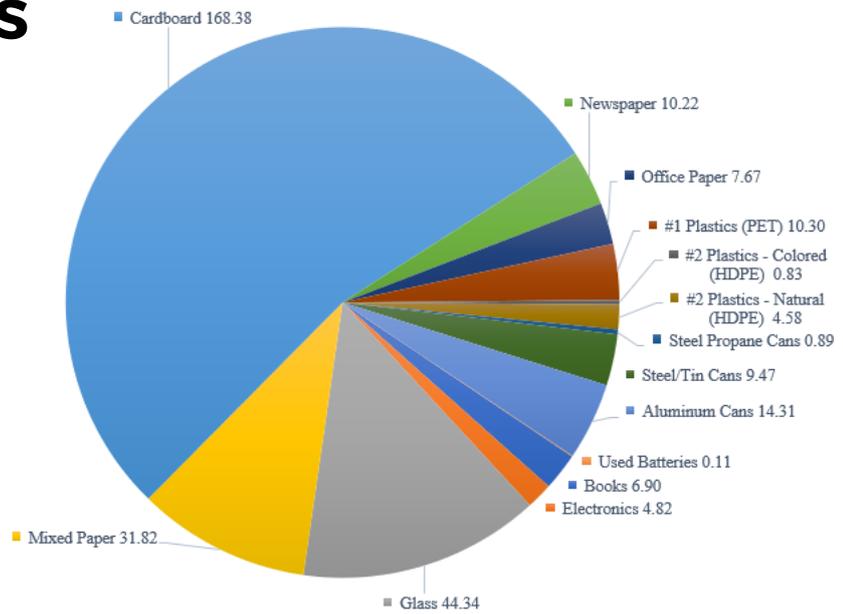
In 2019, the CRC underwent a massive physical and operational overhaul through the following activities:

- Acquired and installed a new baler that effectively compacts recyclable items into compressed cubes ("bales");
- Restructured the collection area to optimize traffic flow, recycling drop-off, and enhance safety;
- Cleaned, organized, and maintained the entire property;
- In collaboration with the Canyonlands Chapter of the Utah Native Plants Society and Moab Solutions, a "recycled" garden containing native plants was developed along the entrance to the CRC.

EXPANDED SERVICES

The District enhanced its services and recycling options by expanding or resuming certain activities such as:

- Added acceptable recyclable commodities back into the recycling program that were originally removed in mid-2018 (i.e., mixed paper, newspaper, colored #2 plastics);
- Resumed the recycling of color-sorted glass - glass is no longer crushed at the Moab Landfill;
- Expanded the accepted items during the monthly electronic waste recycling events, including:
 - Now accepting used antifreeze, mercury-containing devices, and elemental mercury;
 - Promoted the collection of other acceptable items including electronics, compact fluorescent lightbulbs (CFLs/curly-Qs), fluorescent tube lights, and batteries.



BREAKDOWN OF RECYCLING COMMODITIES (IN TONS)
SHIPPED FROM THE COMMUNITY RECYCLE CENTER IN 2019

KEEPING IT LOCAL

In an effort to reduce the District's carbon footprint, a series of actions have been taken to keep all of the recyclables collected at the CRC within the United States with a focus on local and regional markets. The majority of the recyclables collected at the CRC remain in the State of Utah and Western Colorado. Other items are sent to regional markets - nothing is shipped overseas. Cardboard that is received by residential and commercial entities at the CRC is shipped directly to processing mills located in Springfield, Oregon and Lawton, Oklahoma.

Color-sorted glass (clear, brown, and green/blue) collected at the CRC is transported to Salt Lake City, Utah where it is recycled into new bottles or blown into fiberglass insulation. The District continues to research ways to keep all recyclable commodities within the community for reusable purposes.



Aerial view of restructured recycling collection area complete with reused yellow parking strips.

SCENIC DUMP?

Back in 1986, the Moab Landfill was conferred the title of "Most Scenic Dump" alongside a sister landfill in Kodiak, Alaska. It was a marketing ploy by the Moab Chamber of Commerce to enhance tourism and commerce following a downward shift of mining activities in the area.

Despite being the "Most Scenic Dump," previous operational deficiencies at the Moab Landfill left the site overwhelmed with vast quantities of unprocessed and degraded materials. New District management devised and executed a cleanup plan and decided a shift in perception and opinion was needed.



Moab Landfill in March 2019 prior to massive clean-up activities.

CHANGING PUBLIC PERCEPTION

The Times-Independent article "*From scenic dump to efficient facility*" dated 8-25-19, outlined efforts to optimize operations and enhance public perception of the District's landfills and the CRC. Efforts to consolidate and restructure the Moab Landfill included addressing safety concerns, proper management of inbound materials, performing routine litter cleanups, accepting scrap metal for recycling, banning the acceptance of cardboard for landfilling, removing and recycling old steel drums and waste fluids, and the installation of a new gatehouse.

The District was a primary financial supporter of multiple community-wide events and special services in partnership with other entities such as Rim to Rim Restoration, the Dept. of Natural Resources, the Sheriff's Office, the City of Moab, Grand County, and Monument Waste Services, including an unprecedented free green waste acceptance event as part of a major fire mitigation effort throughout Grand County.

In April, a spring cleanup event was held in Castle Valley, in collaboration with Monument Waste, where the District offered discounted disposal fees and a free recycling service.



Moab Landfill in October 2019 following waste tire removal, fill sequence enhancements, and waste consolidation.

MODIFICATIONS & THE FUTURE OF MOAB LANDFILL

The physical changes at the Moab Landfill were accomplished through a variety of actions such as:

- Consolidating working areas for receiving waste to optimize operations and limit windblown trash;
- Purchased and installed a new gatehouse for receiving inbound materials and restructured the traffic logistics of the facility;
- Continued to develop a perimeter berm with a base layer of inbound concrete to create a physical barrier to curtail windblown litter onto roadways.

The District has ongoing plans to continue to optimize and enhance its landfill operations.



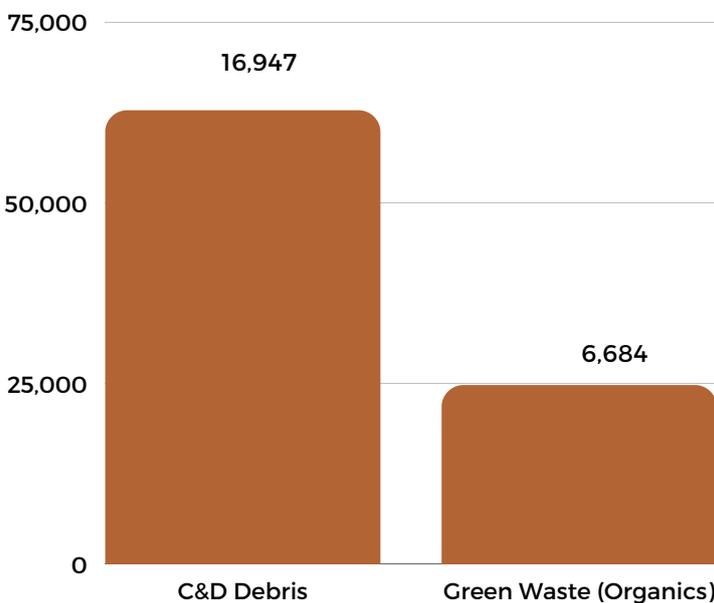
Aerial view of Moab Landfill (dated: 11/2/2019)

METAL DIVERSION

In 2019, the District enhanced its waste diversion efforts at the Moab Landfill via the implementation of a free scrap metal recycling program and cardboard disposal ban to increase the lifetime and reduce the airspace utilization of inbound materials at the Moab Landfill.

Approximately 33.54 tons of scrap metal were diverted to Pacific Steel in Grand Junction, Colorado for recycling. By keeping the scrap metal within the Rocky Mountain region and recycling said material, our carbon footprint is reduced, less material is landfilled, and Grand County businesses and residents can save money through the environmentally-friendly disposition of scrap metal. Cardboard is redirected to the CRC where the material is processed for recycling.

2019 MOAB LANDFILL SOLID WASTE QUANTITIES (IN CUBIC YARDS)



GREEN RECLAMATION

Due to concentrated efforts to optimize landfill operations, heavy non-organic contaminants contained in inbound green waste, and historical operational deficiencies, the District's pilot composting program was put on hold in 2019. In July 2019, a new green waste recovery area was developed where District staff could more effectively screen and manage inbound green waste, minimize non-organic contaminants, and educate the public about the importance of clean organic material for reclamation.

The District intends to reclaim the new green waste pile in the form of mulch and reevaluate its infrastructure and operations for an effective composting program in 2020.



Photo: View of the historical tire pile at Moab Landfill during removal
(Dated: 10/10/2019)

THE TIDAL WAVE OF TIRES

The Moab Landfill may have been famous for its title of "Most Scenic Dump" but the tidal wave of tires was certainly an eyesore against the red fins and ridges. A decade-old historical pile of waste tires, weighing a total of 991 tons (1.98 million pounds), were removed in 2019 in collaboration with the Utah Department of Environmental Quality in accordance with the Waste Tire Recycling Act and the Waste Tire Recycling Fund.

In the Times-Independent article dated October 18, 2019 "Tireless effort: Nearly 1,000 tons of rubber removed from Moab Landfill," the company that was contracted to perform the massive waste tire cleanup, TDFI, LLC, reported that the tires would be shredded at the company's facility in Fillmore where the metal will be recovered for recycling and the tire shreds will be used for energy recovery or tire-derived fuel.

Now that the historical tidal wave has been removed, the District has developed a new approach to properly stage and manage inbound waste tires in order to avoid another rubber eyesore in the future.



Evan Tyrrell (District Manager) and Sam Mealey (District Operator) load the last two tires from the historical tire pile at Moab Landfill.



Aerial view of the Klondike Landfill (Dated: 8/31/2019)

SOLID WASTE BREAKDOWN & KLF IMPROVEMENTS

In 2019, the Klondike Landfill accepted approximately 17,000 tons (34,000,000 pounds) of waste from Grand County and immediate surrounding areas. The diagram to the right provides a breakdown of the most commonly accepted materials.

- Municipal Solid Waste: **73.6%**
- BioSolids: **11.74%**
- Special Waste (includes Petroleum Contaminated Soils, Industrial Waste, & Non-Friable Asbestos Containing Material): **10.3%**
- Grease Trap Waste: **2.9%**
- Construction & Demolition Debris (C&D): **1.4%**

The Klondike Landfill made some extensive improvement over the course of 2019: working areas were consolidated for receiving waste, a culvert was installed in a major drainage area to enhance stormwater drainage, ongoing road improvements were performed to ensure reliable landfill access, and active perimeter cleanups of windblown litter were conducted.



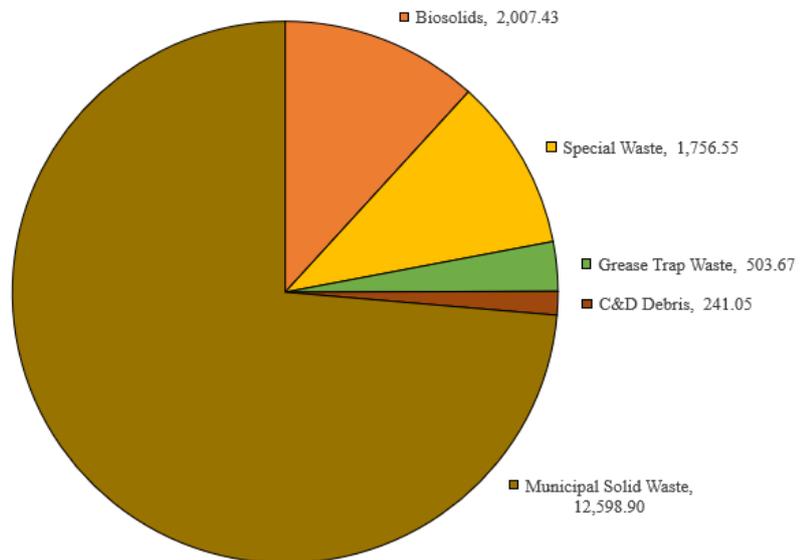
Klondike Landfill receiving a truckload of municipal (household) solid waste.

KLONDIKE 411

The Klondike Class I Landfill is located approximately 20 miles north of Moab and is permitted to accept nonhazardous solid wastes, including municipal, commercial, and industrial solid waste, construction & demolition debris, petroleum contaminated soils, non-friable asbestos containing material, biosolids, waste grease, and other special wastes.

The Klondike Landfill is the final destination for a large portion of the solid waste generated by residents, businesses, and tourist activity in Grand County. For safety and liability reasons, the Klondike Landfill is only accessible to franchised haulers and is not open to the public.

2019 KLONDIKE LANDFILL SOLID WASTE QUANTITIES (IN TONS)



BRINGING SCIENCE TO KLONDIKE

For 2020, the District has comprehensive plans to bring strategic planning, operations streamlining, and the use of engineering to further extend the lifespan of the Klondike facility in anticipation of continued county and tourism-related growth.

Other changes include the purchase of an upgraded refuse compactor (Bomag 772) that will increase the efficiency of solid waste compaction while decreasing the amount of airspace (i.e. landfill volume) taken up by trash. By utilizing this enhanced refuse compactor, the Klondike Landfill can increase its projected lifespan and save money on operational expenses due to added efficiencies.

The District will also be utilizing the services of a Professional Land Surveyor to properly delineate boundary markers, slope grades, and other site features for future planning and the development of solid waste disposal cells.

HOUSEHOLD HAZARDOUS WASTE

On May 4, 2019, the District held its free annual Household Hazardous Waste (HHW) Drop-Off Event for Grand County residents to ensure the safe disposition of unwanted household chemicals such as cleaners, solvents/paint thinners, and more. This event typically costs the District upwards of \$10,000 per event; the collection, packaging, transportation, and disposition of these materials is provided by the vendor, Veolia Environmental Services.

The 2019 HHW event marked the end of the District's two-week-long Free Spring Cleanup Voucher Program (held at Moab Landfill), where Grand County residents can dispose of up to two (2) cubic yards of acceptable waste for free.



Photo: The annual Household Hazardous Waste Collection Event held at Monument Waste Service Transfer Station on May 4, 2019 - disposition provided by Veolia Environmental Services.

CASTLE VALLEY CLEAN-UP

In collaboration with Monument Waste Services, the District supported the annual Castle Valley Spring Cleanup where the District provided free onsite recycling and reduced landfill fees for the disposal of non-recyclable items.

OTHER 2019 EVENTS

The District was involved in a variety of collaboration events such as:

- The District participated in "A Conversation on Recycling" panel discussion on KZMU's This Week in Moab;
- Participated in a panel discussion entitled "Recycling Realities" hosted by the Grand County League of Women Voters;
- Hosted "Tea & A Topic" series discussions with the Resiliency Hub on a variety of topics such as "State of the Waste Stream" and "Creative Reuse";
- In December 2019, the District entered into a Memorandum of Understanding with Monument Waste Services (MWS) that reduces financial risks to MWS while securing revenues to the District in the form of tipping fees at the Klondike Landfill.



Photo: Employees, Herman Herrera and Keith Roseware, pose with the District collection bins during the annual Castle Valley Spring Clean-Up Event.

AMERICA RECYCLES DAY EVENTS

On November 15th & 16th, the District in collaboration with Moab Solutions, Colorado Document Security, and the Moab Area Travel Council (MATC) celebrated America Recycles Day through a series of recycling events and activities. Moab Solutions sponsored a Cash for Cans collection event (residents brought clean aluminum cans in exchange for cash), Colorado Document Security provided free personal document shredding via a mobile shredder, and MATC handed out free "Do It Like A Local" swag.

The District is planning to continue to support and sponsor these important special events on a regular basis while enhancing partnerships, collaboration, and participation with local residents, businesses, and other organizations.



Photo: View of baled aluminum cans during the America Recycles Day events: Cash For Cans and Free Document Shredding (provided by Colorado Document Security).

UPGRADES & ACCOMPLISHMENTS

In 2019, the Solid Waste District achieved light years of progress towards addressing chronic operational deficiencies at all of its operations. A few accomplishments are as follows:

- Welcomed a new District Manager, Evan Tyrrell (January 2019), Facilities Supervisor, Christopher Scovill (November 2018), and Jessica Thacker, part-time Program Assistant & District Clerk (September 2019) to the organization;
- Welcomed a new At-Large Administrative Control Board Member, Chad Harris, who is the Environmental Manager at Intrepid Potash;
- Continually advanced the safety culture within the organization while enhancing policies and procedures with a 'safety first' emphasis; and
- Performed a comprehensive review of the District's fee structures, including a comparison of regional landfill fees, and revamped the District's fee structures.

WHAT'S IN STORE FOR 2020

The Solid Waste District has exciting and interesting ideas and plans for moving forward into 2020:

- The Solid Waste District will finalize the purchase of a Bomag 772 Refuse Compactor to be utilized at the Klondike Landfill to enhance airspace utilization and increase the lifespan of the landfill.
- A physical land and topographic aerial survey will be conducted to update site maps of the District's landfills, delineate legal boundaries and easements, update site features such as utilities, roads, and physical structures, and obtain topographic data to serve as benchmarks for future planning and airspace utilization studies.
- Enhance the District's green waste recovery program via increased customer education and screening of inbound material. Clean, recoverable organic material will be chipped and/or ground into mulch to increase waste diversion and provide for community beneficial reuse options via the sale of the recovered material. The potential to use this material as feedstock for future composting operations will also be evaluated.
- Continue to identify new and expand existing waste diversion programs in our community while facilitating ongoing, continuous improvements at all Solid Waste District operations.



View of the La Sal Mountains from the Moab Landfill on the last day of 2019

DISTRICT STAFF

Evan Tyrrell.....District Manager
 Chris Scovill.....Facilities Supervisor
 Jessica Thacker.....Program Assistant/District Clerk
 Brandon Bertwell.....Operator
 Ricky Childs.....Gatehouse Attendant
 Herman Herrera.....Operator
 Curtis Hill.....Operator
 Keith Rosewaren.....Operator
 Sam Mealey.....Operator
 Adam Watkins.....Operator II
 Brad Woodard.....Master Mechanic

DISTRICT LOCATION AND HOURS

Community Recycle Center
 1000 Sand Flats Road, Moab, Utah 84532
 Mon - Fri: 8am - 5pm
 Sat: 8am - 1pm
 Closed Sundays & Holidays

Moab Landfill (0.6 miles past the CRC facility on Sand Flats Road)
 Mon, Tues, Thurs, Fri: 9am - 5pm
 Weds & Sat: 9am - 1pm
 Closed Sundays & Holidays

Phone: 435.259.3867
www.swssdl.org



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