

2023 Annual Report to the Colorado General Assembly:

Status of the Solid Waste Management Program in Colorado

February 1, 2024



COLORADO

**Hazardous Materials
& Waste Management Division**

Department of Public Health & Environment

Table of contents

Status of the Solid Waste Management Program in Colorado	3
Introduction	3
Accomplishments	4
Compliance assistance	4
Compliance monitoring and enforcement	5
Table 1 - Types and numbers of inspections performed by program staff	5
Figure 1 - Solid Waste Program: Facility inspections	5
Figure 2 - Solid Waste Program: Enforcement actions	6
Small landfill compliance initiative	6
Permitting	7
Figure 3 - Solid Waste Program: Project management data	7
Figure 4 - Average number of elapsed days document types are in backlog	8
Figure 5 - Average number of billable hours to review document types	9
Figure 6 - Average number of elapsed days to review document types	9
Materials management and recycling	10
Waste tire program	10
Waste tire end user fund	11
Table 2 - Current and future rebate amounts of the waste tire end user fund	11
Waste tire program compliance and enforcement	11
Illegal waste tire cleanup program	11
Waste tire disposal and recycling metrics	11
Figure 7 - Percent of newly generated CO waste tires recycled and salvaged	12
Figure 8 - Top 10 waste tire end uses 2022	12
Figure 9 - Trends in waste tire salvage and recycling	13
Beneficial use applications	13
Paint stewardship	13
Producer responsibility program for paper and packaging	14
Recycling and materials diversion tracking	14
2022 Municipal solid waste diversion data	14
Figure 10 - Colorado MSW diversion rate	15
Figure 11 - Waste diversion composition in MSW and industrial waste.	16
Regional diversion	17
Table 3 - Regional diversion rates, including diversion goals	17
Waste diversion composition and trends	17
Figure 12 - Annual trends in MSW diversion	18
Total waste generation	18
Figure 13 - Annual waste generation by category, including disposal and diversion	18
Benefits of waste diversion	19
2023 legislation implemented by the Solid Waste and Materials Management Program	19
Closed landfill remediation grant program	19
Compostable packaging	19
Diversion of organic materials from landfills study	19
Program funding	20
Figure 14 - Solid Waste Program budget	20
Conclusion	21
Document information	22

2023 Annual Report to the Colorado General Assembly: Status of the Solid Waste Management Program in Colorado

Introduction

Colorado's Solid Waste and Materials Management Program (the program) is responsible for ensuring compliance with laws and regulations concerning the management of solid waste. The authority for this program is in the Colorado Solid Waste Act, 30-20-100.5, *et seq.*, C.R.S, and the U.S. Environmental Protection Agency (EPA) has approved Colorado's solid waste management program. With that approval, the authority to implement requirements for managing solid waste in Colorado rests completely with the state.

The program is committed to systematically addressing health equity and environmental justice, by administering its programs in a way that makes meaningful decisions concerning the environment, with the participation of affected residents and their community. Additionally, the program places high priority on working and cooperating with local governments, investigating citizen complaints, and being available to the public through the technical assistance line.

Primary elements of the program include compliance assistance, compliance monitoring and enforcement, permitting, and materials management and recycling. Each of these program elements is discussed in the following sections.

The program currently regulates the following facilities:

Facility type	Number of facilities
Landfills	76
Municipal Solid Waste (MSW) landfills	55
Construction and demolition debris (C&D) landfills	5
Waste tire monofills	3
Coal combustion ash monofills	8
Other landfills (special wastes, landfarms)	5
Closed landfills	194
Composting facilities	49
Incinerators	4
Recycling facilities	231
Medical waste facilities	23
Solid waste impoundment facilities	128
Commercial exploration and production waste impoundments	11
Waste tire registrants (facilities, haulers, and generators)	3,013

Accomplishments

Compliance assistance

A goal of the program is for all regulated facilities to be in, and stay in, compliance with state laws and regulations. The traditional inspection and enforcement program serves as one primary mechanism for reaching that goal. However, compliance assistance is another important method for obtaining and maintaining compliance. The General Assembly recognized the value and importance of compliance assistance in Section 30-20-101.5(2)(f), C.R.S., which states the department is to “establish a preference for compliance assistance with at least 10 percent of the annual budget amount being allocated to compliance assistance efforts.” In fiscal year (FY) 2023, 12% of staff time was devoted to meeting regulatory entities’ requests for compliance assistance.

The program has developed, and continues to invest in, a broad range of compliance assistance services, to help the regulated community manage solid waste appropriately. These compliance assistance services include the following activities:

- Managing a part-time customer assistance and technical assistance phone line and email box. This phone line is staffed from 8 a.m. to noon, Monday through Friday, to provide information on common waste management questions and more complex or detailed regulatory guidance.

Through the technical assistance phone line/email inbox, in FY23 the program responded to:

480 Phone calls

173 Emails

- Providing a wide range of solid waste guidance documents, compliance bulletins, and an informative website (<https://cdphe.colorado.gov/swguidance>).
- Maintaining an extensive set of guidance information for regulated entities online and in print.

During FY23, the various Solid Waste Management websites received:

63,153 Hits

- Program inspectors routinely incorporate compliance assistance and pollution prevention into compliance inspections performed each year. In the past year, program staff have delivered compliance assistance on 57 of the 266 inspections performed, or on 21% of inspections.

Compliance monitoring and enforcement

Table 1 - Types and numbers of inspections performed by program staff

Facility type	Number of inspections
Landfills	73
Composting facilities	3
Medical waste facilities	4
Commercial exploration and production waste impoundments	2
Recycling facilities	12
Asbestos in soil sites	6
Beneficial use sites	6
Illegal disposal sites and complaint follow-up	32
Environmental covenant inspections	3
Construction and demolition disposal facilities	1
Paint facilities	24
Waste tire sites (facilities and haulers)	100
Total - Inspections performed by program staff	266

Figure 1 - Solid Waste Program: Facility inspections

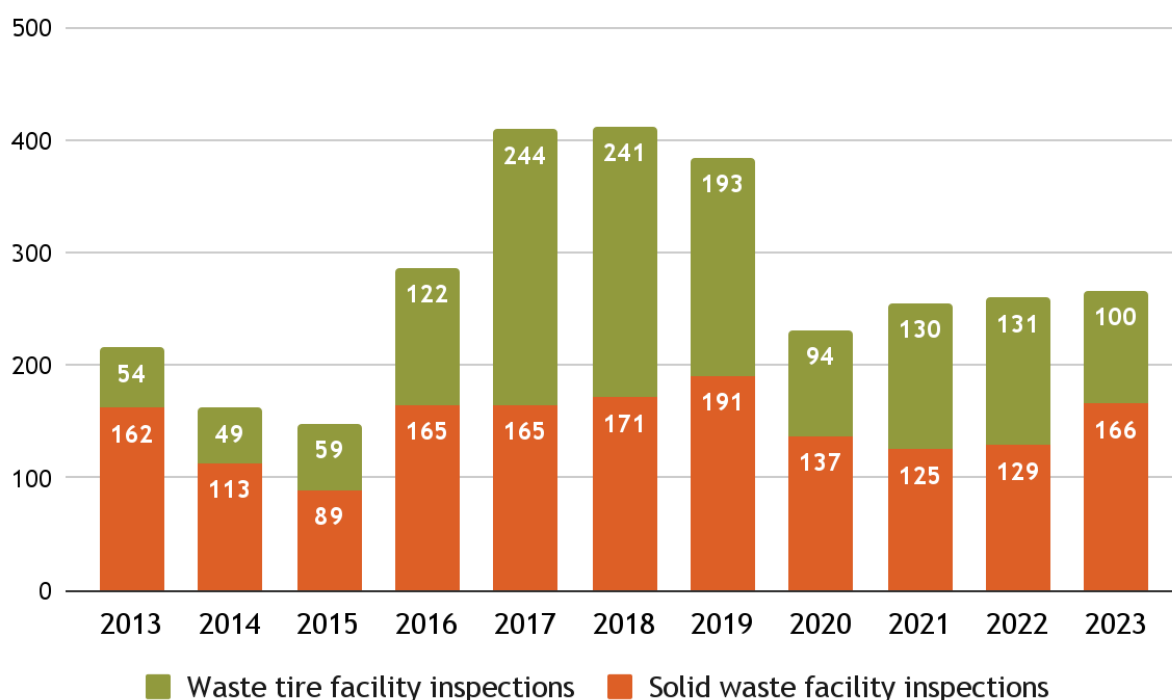
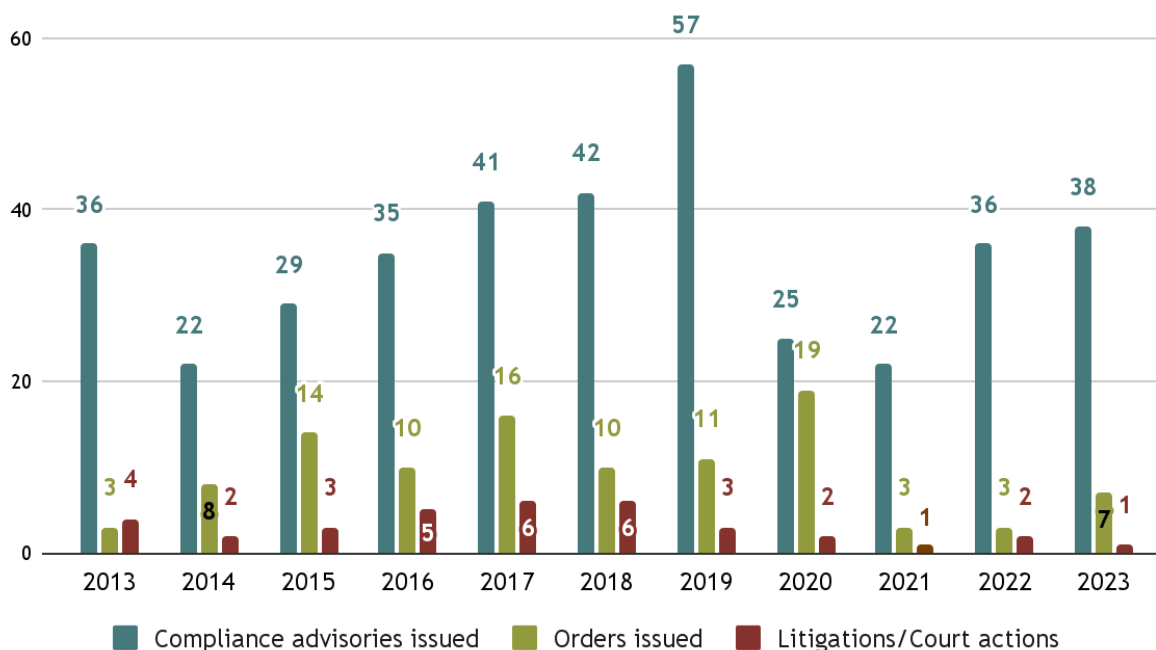


Figure 1 illustrates the inspections program staff performed during FY 2023, along with a comparison to previous years. In FY 2023, each solid waste inspector performed an average of 24 inspections. Every inspection carries administrative responsibilities, including reviewing files, preparing inspection reports, and notifying other regulatory agencies of the inspection results. Many inspections result in enforcement, which requires inspectors to track return-to-compliance activities at the facility, prepare enforcement documents, and document the facility history in the solid waste database.

The program places high priority on complaints and spill reports. In FY 2023, the program received 63 solid waste complaints. Of those, program staff investigated and/or inspected 10 complaints and referred 53 to local governments or other agencies. In addition, the program received 176 spill reports. The program followed-up on 135 of those spills, to ensure facilities completed appropriate cleanup, and the program referred 41 spills to local governments or other agencies.

Inspections, complaints, and spill follow-ups may result in formal and informal enforcement actions. Informal actions are called Compliance Advisories, and formal actions include Compliance Orders and civil actions filed in court. Figure 2 presents the number of formal and informal enforcement actions the program completed in FY 2023 and previous years.

Figure 2 - Solid Waste Program: Enforcement actions



Referring to Figure 2, the program issued Compliance Advisories within 90-days, 97% of the time; the program issued 100% of the seven Compliance Orders within the program's 300-day internal goal. Of the seven Compliance Orders shown for FY 2023 in Figure 2, one of the orders assessed \$117,350 in penalties, payable to the Colorado General Fund. The remaining orders assessed no penalties.

Small landfill compliance initiative

In FY 2023, the program continued its efforts to assist small landfills with groundwater monitoring and developing Engineering Design and Operations Plans (EDOPs) that are compliant with the solid waste regulations. For the 10 small landfills where routine groundwater monitoring is applicable, the program funded another round of groundwater sampling in FY 2023. During FY 2023, the program also continued to work with facilities to update and revise their permit documents, including the EDOPs and associated plans, and financial assurance.

Permitting

In Colorado, most solid waste disposal sites and facilities need Certificates of Designation (CDs), which local governments issue. This includes facilities that deposit and treat solid waste, including landfills, incinerators, medical waste treatment facilities, and certain subsets of waste impoundments and composting facilities. However, recycling facilities, transfer stations, and any facility disposing of their own solid waste generated on their own site, do not need a CD.

To obtain a CD, a facility must submit their application to the local government. The local government then refers the application to the program for a technical review, which ensures that the facility can operate safely and in a manner that protects human health and the environment. If the program recommends approving the application, the local government evaluates whether the proposed facility conforms to local land use plans and zoning restrictions. The local government may choose to approve or disapprove the application. However, if the program recommends disapproval, then the local government must disapprove the application.

The program specifically reviews the EDOP portion of the CD application. Certain facilities that do not require a CD must still have the program approve their EDOP. Therefore, the program's "permitted universe" includes all solid waste facilities with EDOPs. This large universe of sites with EDOPs is not static. New facilities are built and existing facilities add new solid waste management units, waste streams, and treatment capabilities - all of which need the program to review and approve EDOPs or EDOP modifications. Figure 3 presents the large number of documents that program staff review for this universe of facilities on an annual basis, from 2013 to 2023.

Figure 3 - Solid Waste Program: Project management data

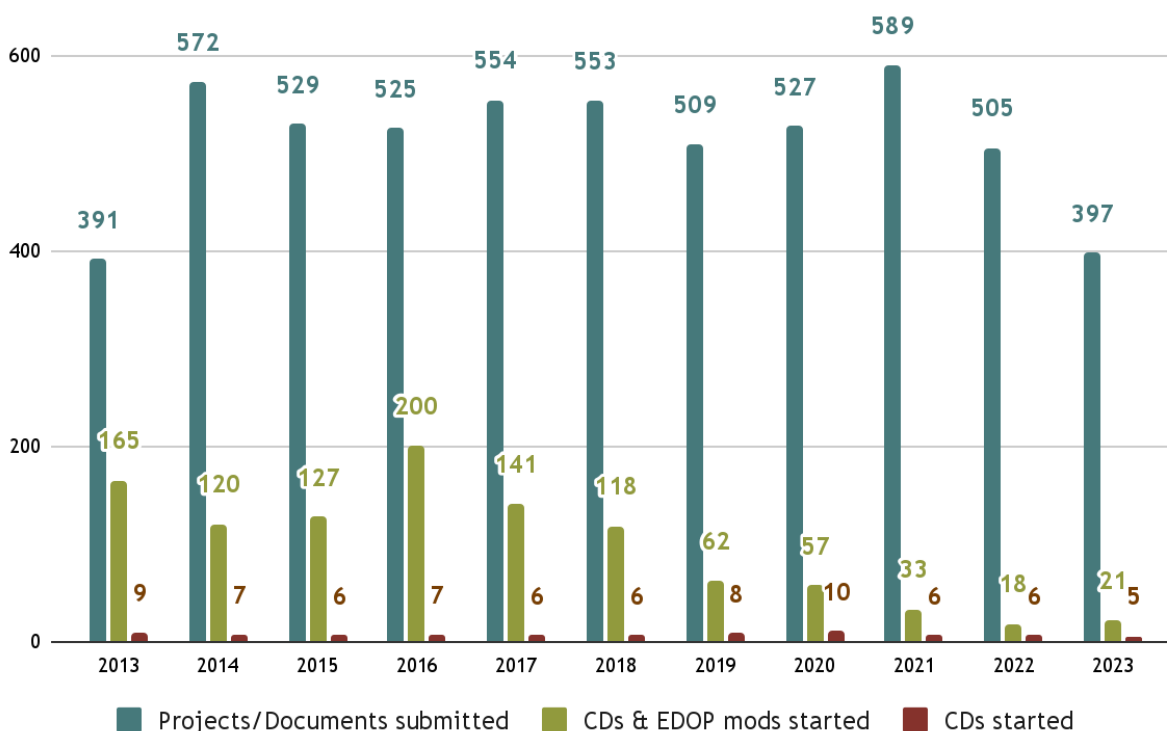


Figure 3 shows a drop in projects received by the program in 2023. However, the graph in Figure 3 does not illustrate the relative complexity of these documents. The program differentiates documents regulated entities submit for review and approval into three categories: projects of high, medium, and low complexity. While the CD application category is, by definition, a complex major project, EDOPs and EDOP modifications, for example, can vary in complexity. Additionally, groundwater monitoring reports can be relatively simple, but new engineering designs for treatment technologies and landfill cells with sophisticated liners and caps can be very complex.

Figures 4, 5, and 6 (below) illustrate the program's efforts on documents of different complexities. These graphs compare FY 2018 through FY 2023 for three measures:

- Number of days to begin the review (days in backlog)
- Number of days to finish the review
- Number of billable hours charged to the customer for the review

Figure 4 shows that the backlog for high and low complexity document types increased again in FY 2023. Backlog for medium complexity document types remained similar to FY 2022, which was much higher than previous years. This is a function of staff turnover and the program's inability to hire new staff over the last year.

Figure 5 shows the average number of hours billed for document types, based on the complexity of the document reviewed. The average number of hours billed per document in FY 2023 remained relatively similar to previous years. Figure 6 shows that the number of elapsed days during review has increased for all document types by about double, as compared to the previous year. This reflects the program being understaffed by three full time employees. Efforts to hire new permitting staff are ongoing.

Figure 4 - Average number of elapsed days document types are in backlog

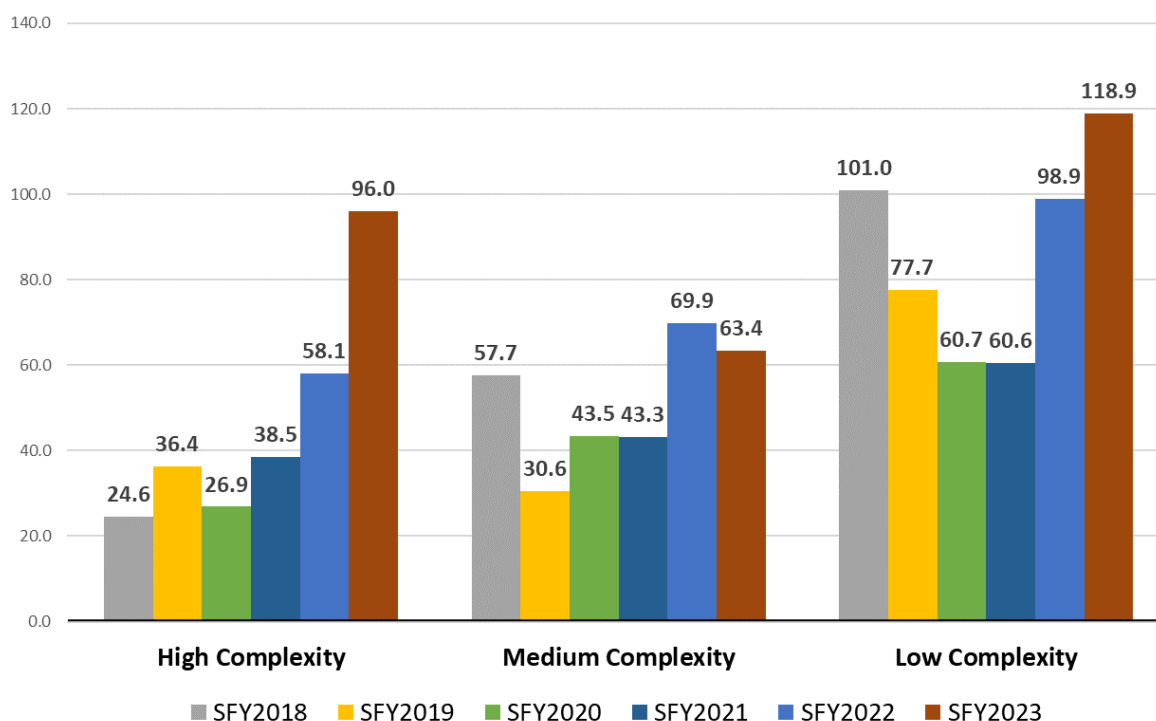


Figure 5 - Average number of billable hours to review document types

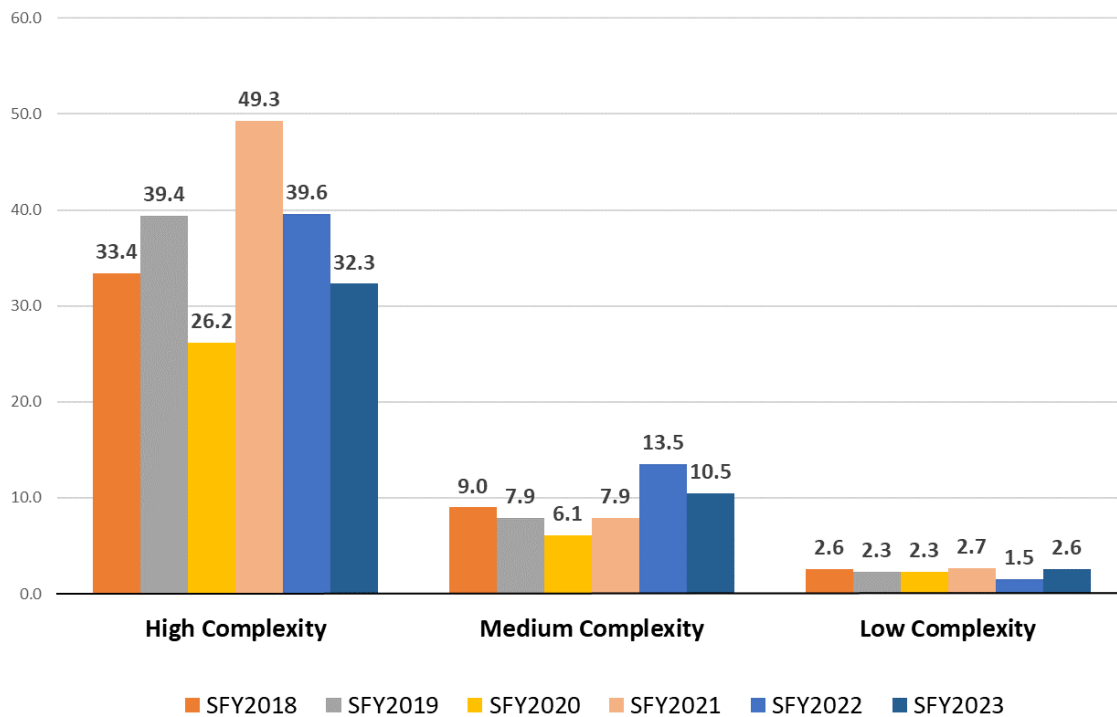
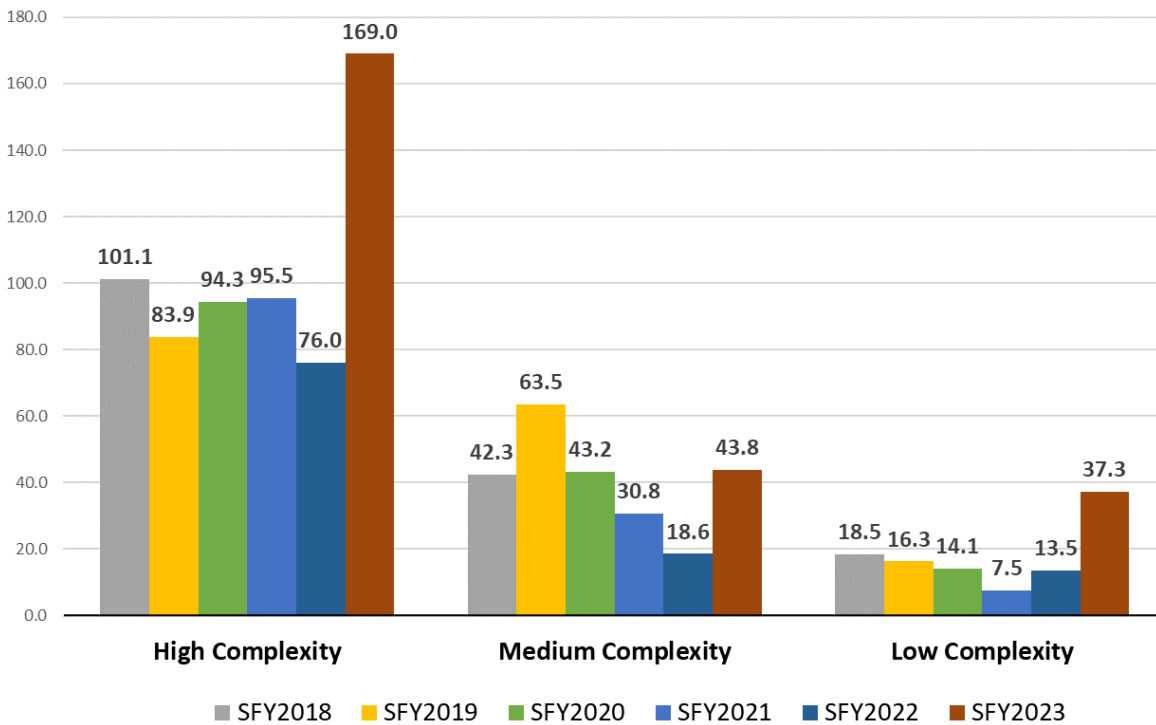


Figure 6 - Average number of elapsed days to review document types



Materials management and recycling

Within the program, there are several materials management and recycling programs, as follows:

1. Waste tire program,
2. Beneficial use program,
3. Paint stewardship program,
4. Producer responsibility program for paper and packaging, and
5. Recycling and waste diversion analysis for Colorado.

Waste tire program

Retailers are required to charge a fee on the sale of each new tire, known as the waste tire fee. The legislature authorized the Solid and Hazardous Waste Commission to set the waste tire fee for both the waste tire administration fund and the waste tire end user fund. The waste tire administration fund is restricted to a maximum of \$0.50 per tire sold, while the waste tire end user fee is limited to \$1.50 per tire. Purchasers of new tires currently pay a total of \$1.25 per tire, with \$0.50 dedicated to the waste tire administration fund and \$0.75 dedicated to the waste tire end user fund. By statute, the fee must be no more than \$0.55 after December 31, 2023. As such, in August 2023, the Solid and Hazardous Waste Commission set the waste tire fee to drop to the statutory maximum of \$0.55, beginning on January 1, 2024. At that time, \$0.50 of the waste tire fee will be deposited into the waste tire administration fund, and \$0.05 will be collected for the waste tire end user fund.

30-20-1403(II) C.R.S authorizes the department to collect the waste tire fee and to reimburse for waste tire end uses that occur through December 31, 2025. The waste tire fee ends on January 1, 2026, and the end user program ends on July 1, 2026.

The program implements the waste tire enforcement, illegal cleanup, and waste tire market development programs using the waste tire administration funds. Program staff use the waste tire end user fund to reimburse end users of products made from waste tires.

Waste tire end user fund

The program issues waste tire end user rebates to the users of products made from waste tires. Rebates are issued according to a tiered structure. The materials types for each tier are defined in statute, but the Solid and Hazardous Waste Commission announced the rebate amounts for each tier. The current and future rebate amounts are shown in Table 2.

In calendar year 2022, the program issued:



\$3,917,801

Rebates for the end use of tire derived products



64,262

Tons of tire derived products

Table 2 - Current and future rebate amounts of the waste tire end user fund

	Material end used	Rebate amounts calendar years 2022 and 2023	Rebate amount per calendar year 2024
Tier 1	crumb rubber, tire derived fuel	\$80 per ton	\$50 per ton
Tier 2	molded products, rubber mulch	\$40 per ton	\$25 per ton
Tier 3	tire bales, alternative Daily cover, tire derived aggregate	\$20 per ton	\$12.50 per ton
Rural hauling rebate	N/A	\$20 per ton	\$12.50 per ton

Waste tire program compliance and enforcement

During FY 2023, waste tire staff conducted 100 waste tire inspections and compliance assistance visits. Of these 100 visits, the program evaluated 58 retailer facilities selling new tires for compliance with the requirements for submitting the waste tire fee, which is assessed on the retail sale of each new tire. Additionally, the waste tire program issued 26 compliance advisories (informal enforcement actions), one unilateral order, and one consent order for non-compliance with waste tire laws and regulations.

Illegal waste tire cleanup program

The Illegal Waste Tire Cleanup Grant program provides funding for the cleanup of illegal or abandoned waste tire sites. The program removed approximately 4,172 passenger tire equivalents in calendar year 2022 (2023 data is not yet tabulated), reducing environmental risks from tire fires and eliminating prime mosquito breeding grounds, at a cost of \$56,500.

Waste tire disposal and recycling metrics

Some of the more-significant metrics tracked for the waste tire program are illustrated in Figures 7, 8, and 9 (below).

- Figure 7 shows that in 2022, 122% of waste tires generated in, or imported into, Colorado were either recycled or re-used. The waste tire recycling industry was able to recycle or salvage tires from existing stockpiles, to achieve a recycling rate over 100%
- Figure 8 illustrates the top 10 uses of waste tires with tire-derived fuel, salvaged tire reuse, and alternative daily cover (at landfills) being the top three uses.
- Figure 9 shows that up until 2018, and from 2020 through 2022, Colorado recycled or salvaged close to, or more than, 100% of the waste tires generated in Colorado. It is important to note that the end user fund was also in existence during these years, until it ended in 2018 and returned again in 2020.

For a complete explanation of the waste tire program, please see the 2022 status report at: www.colorado.gov/pacific/cdphe/swreports

Figure 7 - Percent of newly generated CO waste tires recycled and salvaged

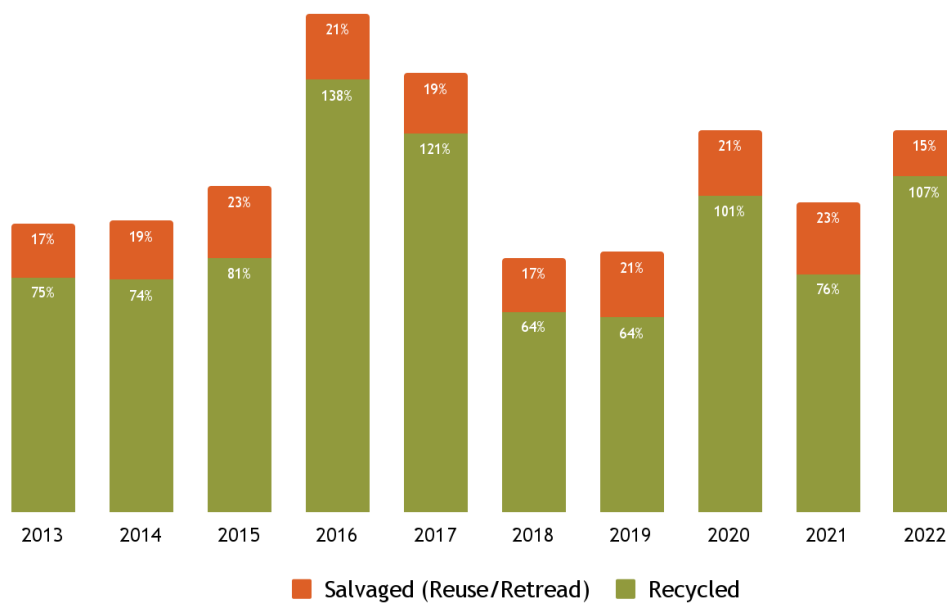


Figure 8 - Top 10 waste tire end uses 2022

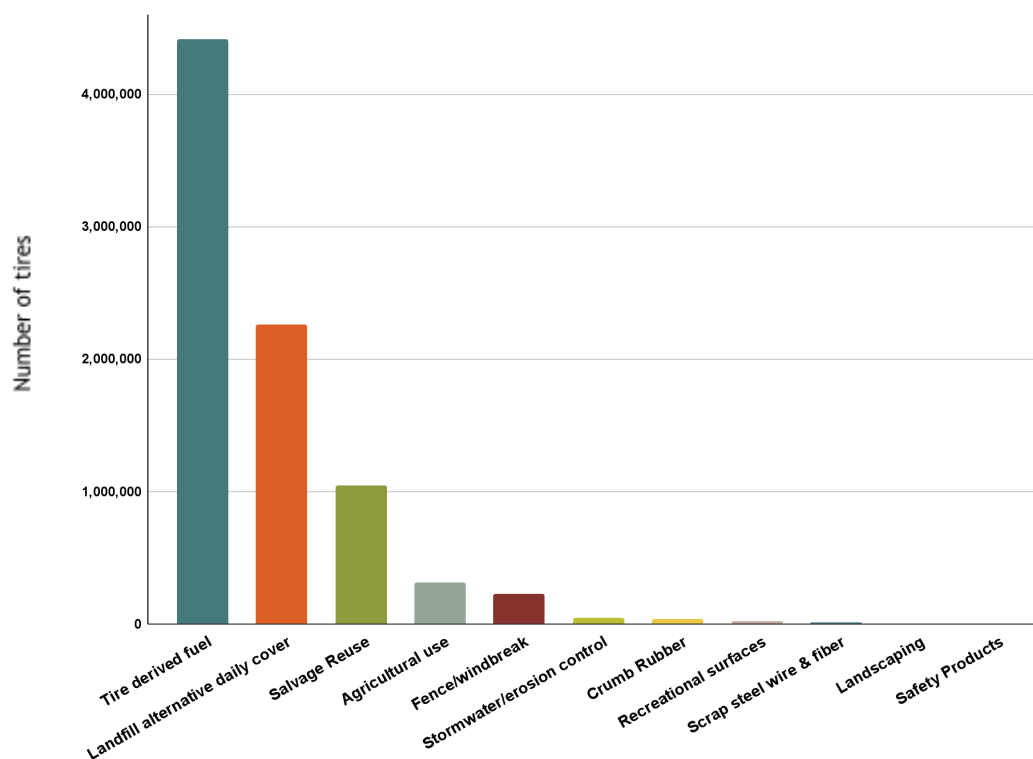
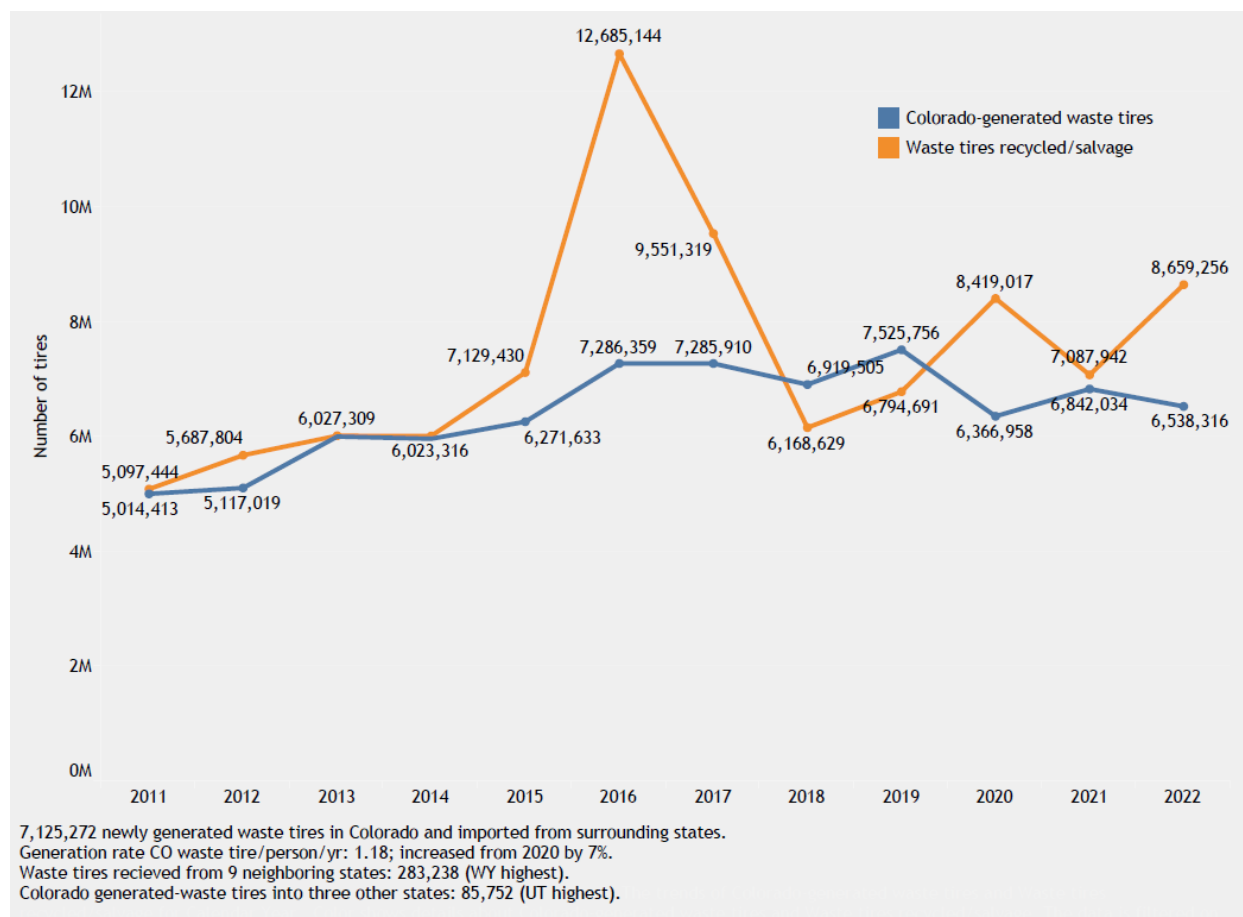


Figure 9 - Trends in waste tire salvage and recycling



For more information about the waste tire program, visit:

<https://cdphe.colorado.gov/wastetires>

Beneficial use applications

Beneficial use of solid waste is using wastes as a substitute for products or feedstock material. Examples include using industrial wastewater for irrigation or dust suppression; land application of organic materials with beneficial crop nutrients; and using coal ash for cement production. The program's materials management unit reviewed eight applications and approved six beneficial use applications in FY 2023. Approved beneficial use projects diverted 416,122 tons of solid waste from disposal and used an additional 240,536 tons of coal ash.

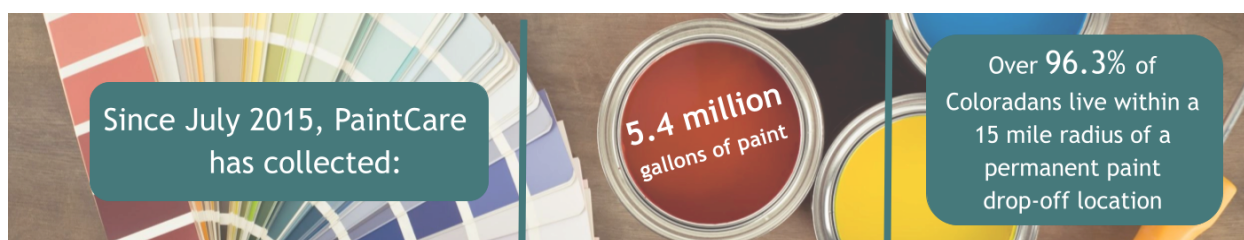
Paint stewardship

Managing unwanted paint occurs under the Architectural Paint Stewardship Act (Section 25-17-4, C.R.S.). Paint manufacturers created PaintCare Inc., a non-profit stewardship organization, which drafted the plan for convenient paint drop-off locations in highly-populated areas and methods for collecting paint in less-densely populated areas. PaintCare contracts with various waste haulers, local household hazardous waste facilities, and paint recyclers to arrange the processing of unwanted paint. While PaintCare does not actually process paint, they contract collection and recycling services, and they are responsible for ensuring that paint recycling and disposal is convenient and free for residents of Colorado.

PaintCare is responsible for reporting to the department by March 31 each year on their performance for the previous calendar year. The program also drafts a report to the legislature annually that summarizes PaintCare's performance.

2022 PaintCare report highlights

In 2022, PaintCare processed 806,605 gallons of unwanted or unusable paint; 84% of the paint collected was latex paint and 16% was oil-based paint. Most of the latex paint collected was either beneficially used or recycled into new latex paint in Colorado.



The PaintCare Plan, the 2022 PaintCare annual report, and the program's 2022 report to legislature can be found at: <https://cdphe.colorado.gov/paint-stewardship-recycling>

Producer responsibility program for paper and packaging

On June 3rd, 2022, the Producer Responsibility Program for Statewide Recycling Act (the Act), House Bill (HB) 22-1355, was signed into law. HB 22-1355 sets up a Producer Responsibility program that requires companies that sell products in packaging, paper products, and food service ware to fund a statewide recycling system to recycle those materials.

The program completed many notable requirements in FY 2023, as directed within the Act, to implement the producer responsibility program, including:

- Completing the first rulemaking associated with the producer responsibility program, to codify a dollar limitation threshold which exempts small businesses from the program requirements;
- Appointing the 15 member producer responsibility program advisory board and hosting monthly meetings starting in March 2023;
- Designating Circular Action Alliance as the producer responsibility organization (PRO), making Colorado the first state in the nation to select a PRO for paper and packaging; and
- Approving a third party contractor to conduct a statewide needs assessment of Colorado's recycling infrastructure and existing gaps.

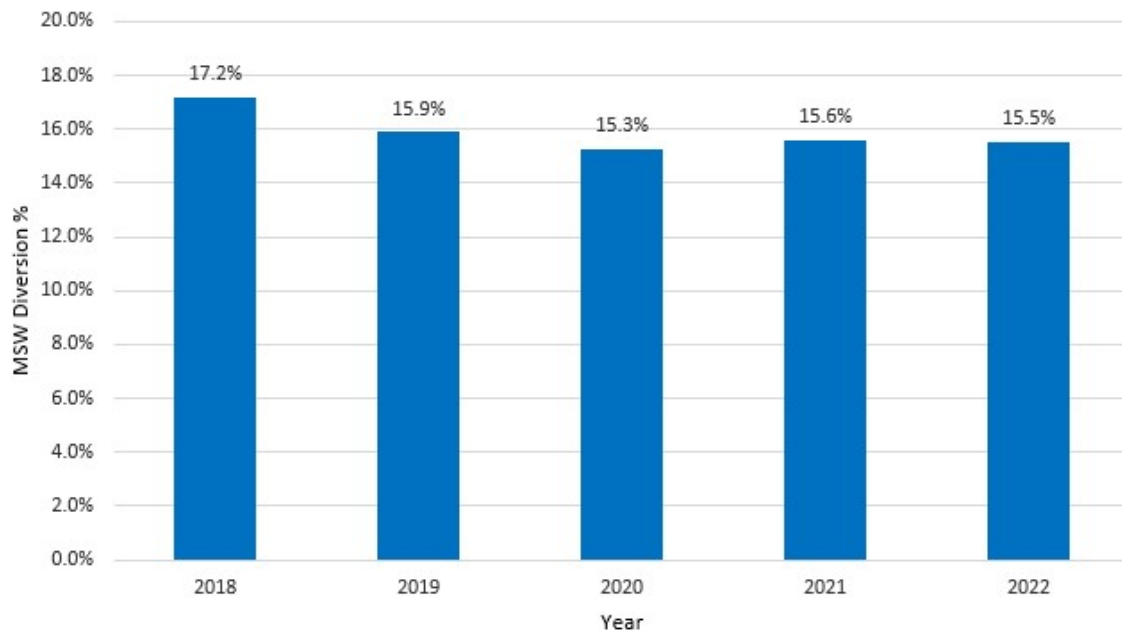
Recycling and materials diversion tracking

2022 Municipal solid waste diversion data

The program tracks many aspects of recycling and waste diversion. Waste generation, which includes both waste disposal and waste diversion, remained relatively flat for total generation, but industrial waste management practices shifted towards less recycling. Figure 10 shows that statewide diversion from recycling and composting of municipal solid waste (MSW) remained relatively similar at 15.5% in 2022, compared with 15.6% in 2021. It is important to note that the 2021 MSW diversion rate was adjusted from 16% in the 2023

program report to 15.6%, due to an error with tabulating waste tire diversion methods in 2021.

Figure 10 - Colorado MSW diversion rate

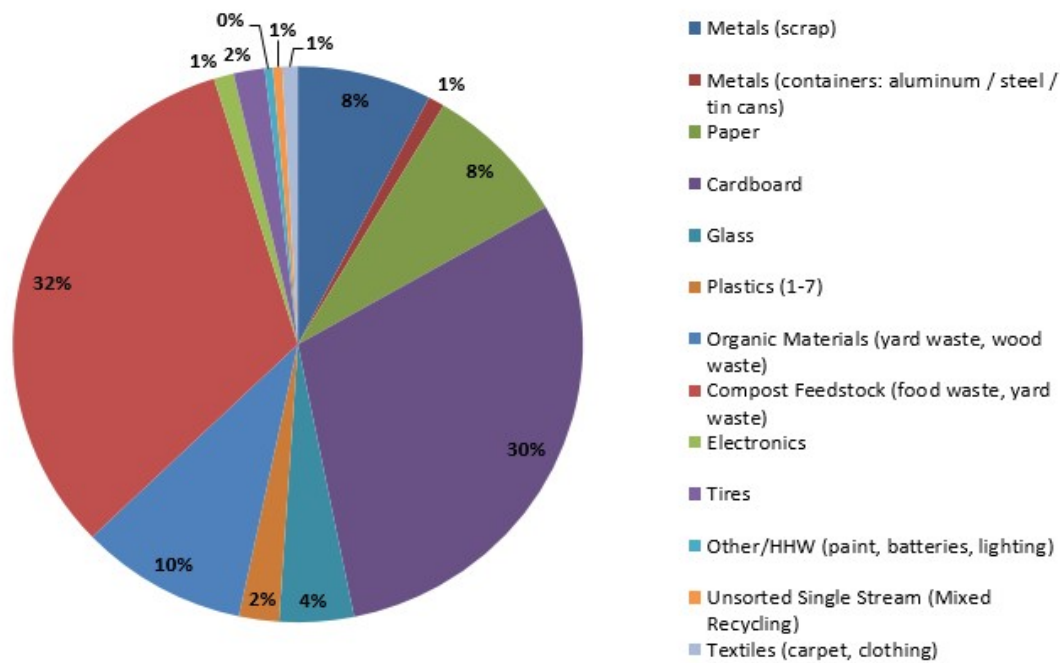


Overall, recycling and composting quantities have remained at a relatively-consistent rate for the last few years. MSW diversion slightly declined in 2022. Colorado is still far from the diversion goals that the Solid and Hazardous Waste Commission adopted in 2016, including the first benchmark of 28% in 2021, with the goal of reaching 45% waste diversion statewide by 2036.

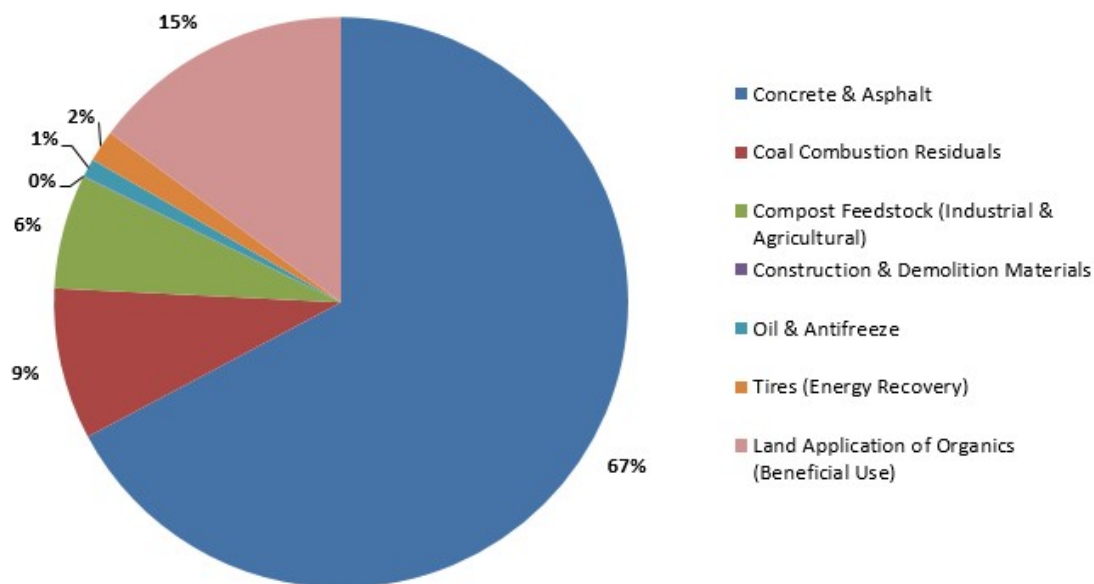
The recycling and composting totals for MSW are presented in Figure 11. It is important to note the distinction between the MSW diversion rate and the total diversion rate. MSW includes waste generated by households, businesses, and institutions. Generally speaking, this waste stream tends to be steady and predictable and is typically used to measure program effectiveness for commonly-generated recyclable materials. The total diversion rate includes all other solid wastes. These wastes consist of things like construction and demolition debris, aggregates, and coal combustion residuals, all of which tend to fluctuate from year to year. While total diversion data is still measured, it is not used in goal setting or measurement because of this volatility. While recyclables such as paper, plastic, glass, and metal are often viewed as the primary component of the diversion rate, organic materials such as yard trimmings and food waste have a high percentage of material diversion by weight.

Figure 11 - Waste diversion composition in MSW and industrial waste.

2022 MSW Diverted Materials by Weight



2022 Industrial Diverted Materials by Weight



Regional diversion

Along with the statewide diversion goals, there are specific regional goals as well. The state is broken into two regions: the Front Range and Greater Colorado. The Front Range region includes the following counties: Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld. The Greater Colorado region includes all other counties.

The goals for these regions consider the economic and logistical challenges of recycling in areas of low population density, existing access to waste diversion infrastructure along the state's urban corridor, as well as the number of residents. The Front Range, for example, amounts to over 80% of the population.

Table 3 shows that the Greater Colorado region is achieving the 2026 benchmark for diversion of 13%, but the Front Range is well behind the targeted rate of 39%. Accordingly, Colorado is short of the 2026 statewide benchmark of 35% waste diversion.

Table 3 - Regional diversion rates, including diversion goals

Region	2022 rate	2026 goals	MSW disposal	MSW diversion
Front Range Region	16.1%	39.0%	5,137,829	989,005
Greater Colorado Region	13.6%	13.0%	789,262	125,425
Statewide	15.5%	35.0%	5,936,091	1,080,550

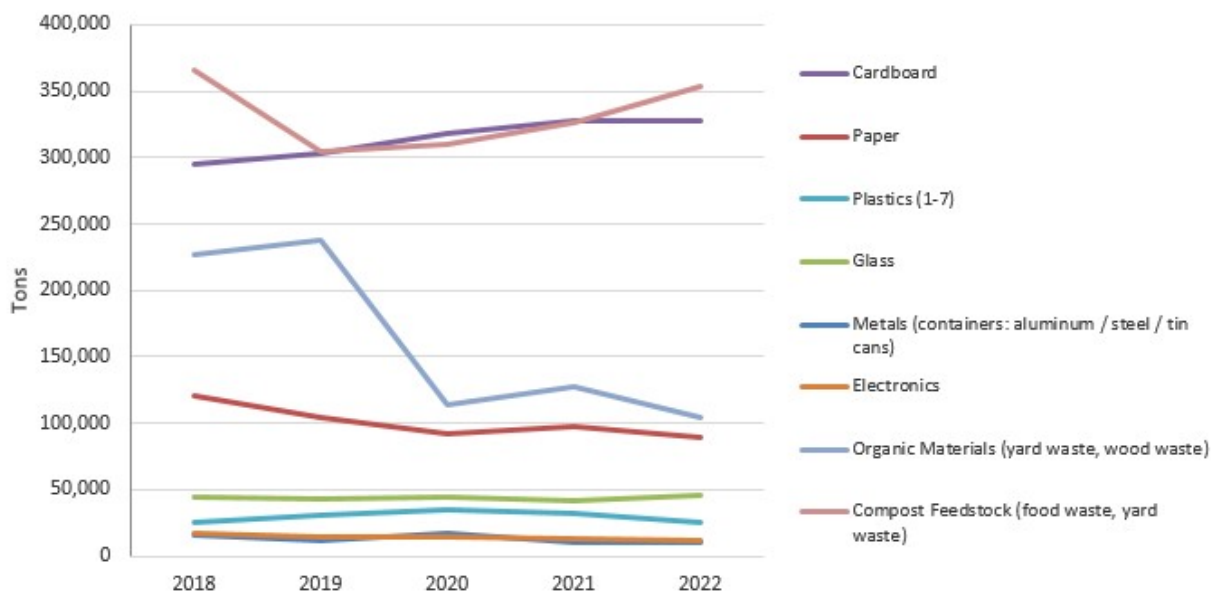
Waste diversion composition and trends

The compositions of both the MSW and industrial waste diverted from disposal are dominated by a few larger and heavier waste streams. As illustrated in Figure 11 above, compost feedstocks, including food scraps and yard waste, is the single biggest component of MSW diversion, at 32% of the MSW diverted by weight. Cardboard makes up another 30% of the MSW diverted from landfills and is the largest source of recyclable material diverted by weight.

In the industrial sector, asphalt, concrete, and aggregates make up 67% of the industrial waste diverted from landfills. It is important to note that diversion is calculated using weight and not volume, and therefore some of the more-dense material streams tend to make up more significant percentages.

Material-specific waste diversion trends for the last several years are illustrated in Figure 12. Diversion of compost feedstocks, including food scraps and yard debris, continues to trend upwards and is now the most diverted material by weight, surpassing cardboard for the first time in 2022. The amount of cardboard recycled has risen in the last five years, while the amount of paper recycled has seen a dramatic decrease. This aligns with national trends, as more consumers have items shipped directly to their households, while the production of print media declines. Recycling of glass increased in 2022, while plastics decreased.

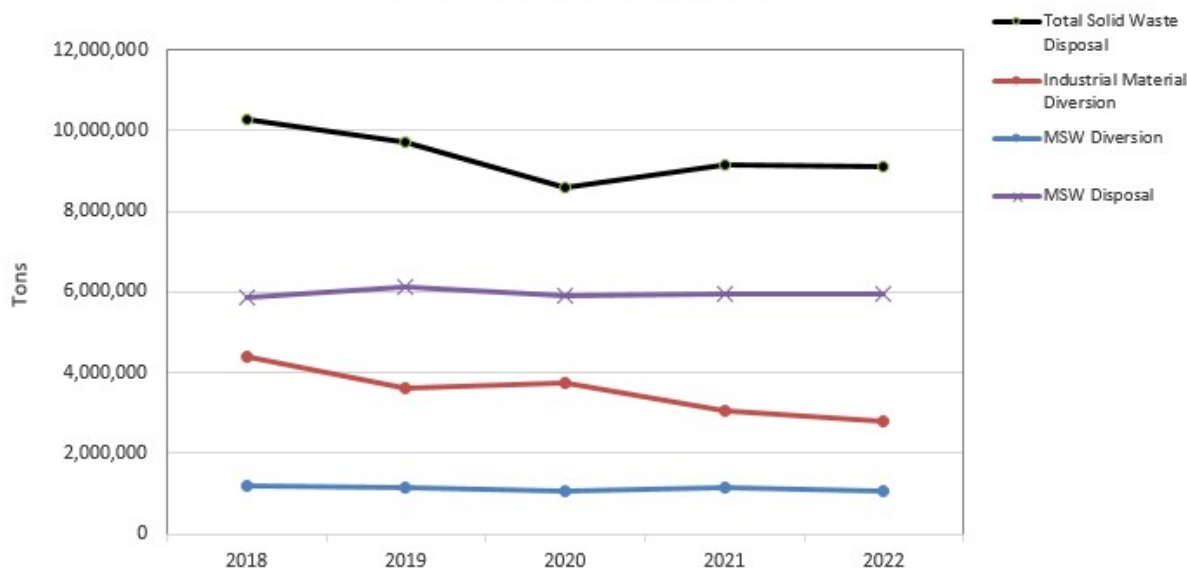
Figure 12 - Annual trends in MSW diversion



Total waste generation

Annual changes in waste generation, including diversion and disposal, are illustrated in Figure 13. Total waste generation remained relatively similar year over year, with a notable decrease in industrial recycling. MSW disposal decreased by 34,000 tons, and MSW diversion also decreased by 13,000 tons. Although MSW diversion decreased in 2022, both by weight and percent diversion, the diversion of compostable feedstocks had a notable increase in 2022.

Figure 13 - Annual waste generation by category, including disposal and diversion



Benefits of waste diversion

There are many benefits of diverting materials from landfills. Not only is valuable landfill space saved, recycling also reduces greenhouse gas generation and energy consumption, and typically creates a stronger economic impact than disposal. Using the EPA's Waste Reduction Model (WARM), the projected savings from waste diversion can be evaluated in a different light. In 2022, the WARM model estimated that Colorado prevented 2,005,853 metric tons of carbon dioxide from being generated, by preventing material going into Colorado landfills. This equates to the emissions from 425,871 passenger cars. The energy savings from diversion were equivalent to the energy used in 153,503 homes in a year.

2023 legislation implemented by the Solid Waste and Materials Management Program

Closed landfill remediation grant program

The Colorado General Assembly passed HB 23-1194 during the last legislative session. HB 23-1194 creates a grant program to provide funding to local governments that own closed landfills contaminating groundwater, creating landfill gas, or having other conditions that present a risk to human health and the environment. HB 23-1194 directs the Solid and Hazardous Waste Commission to adopt rules for implementing the program by July 1, 2024. The Solid and Hazardous Waste Commission must also appoint an advisory committee that reviews grant applications and advises the department on the issuance of grants by May 1, 2024.

Compostable packaging

A number of composting facilities experience increased contamination levels from products that do not break down in their processes. The legislature passed Senate Bill (SB) 23-253 to ensure that any materials labeled compostable truly are compostable. SB 23-253 directs the department to create a forum for citizens to file complaints when they find packaging that does not meet the criteria for compostable packaging established in the statute. After evaluating a complaint, the department will provide non-frivolous complaints to the Colorado Attorney General's Office for further investigation. The program will have the complaint forum active by January 1, 2024.

Diversion of organic materials from landfills study

Based on available waste diversion and landfill composition data, a high percentage of material sent to landfills in Colorado are organic materials, such as food waste and landscape trimmings. As a result, the program worked with a team of consultants to develop a Statewide Organics Management Plan throughout 2022. The Statewide Organics Management Plan includes new recommendations to best address waste diversion of organic waste and incentivize the use of organic materials through localized end markets. Following completion of the Statewide Organics Management Plan, the legislature passed Senate Bill 23-191, which tasks the program to conduct a study on policies and actionable parameters to divert organic materials from landfills. The program is currently in the process of finalizing a contract with a vendor to conduct the study and develop a final report with recommendations for the legislature. The study will be completed prior to August 1, 2024.

Program funding

Funding for the Colorado Solid Waste and Materials Management program comes entirely from fees. The program receives no Colorado General Fund money. The program's funding has five components:

1. Solid Waste User Fee (SWUF), which is a fee based on the weight or volume of waste disposed of at landfills, also known as a "tipping fee,"
2. Hourly Activity Fee, assessed for prescribed services rendered to facilities,
3. Annual Facility Fee, which is an annual fee remitted by facilities that are not required to pay the SWUF,
4. Waste tire fee, assessed on the sale of new tires, and
5. PaintCare program fee, which is a flat fee PaintCare pays.

In FY 2023, the SWUF and hourly review fees provided about 58% of the program's funding needs. The waste tire fee covered 40% of the program's expenses. The PaintCare program covered the remaining 2% of the program's expenses.

Figure 14 - Solid Waste Program budget

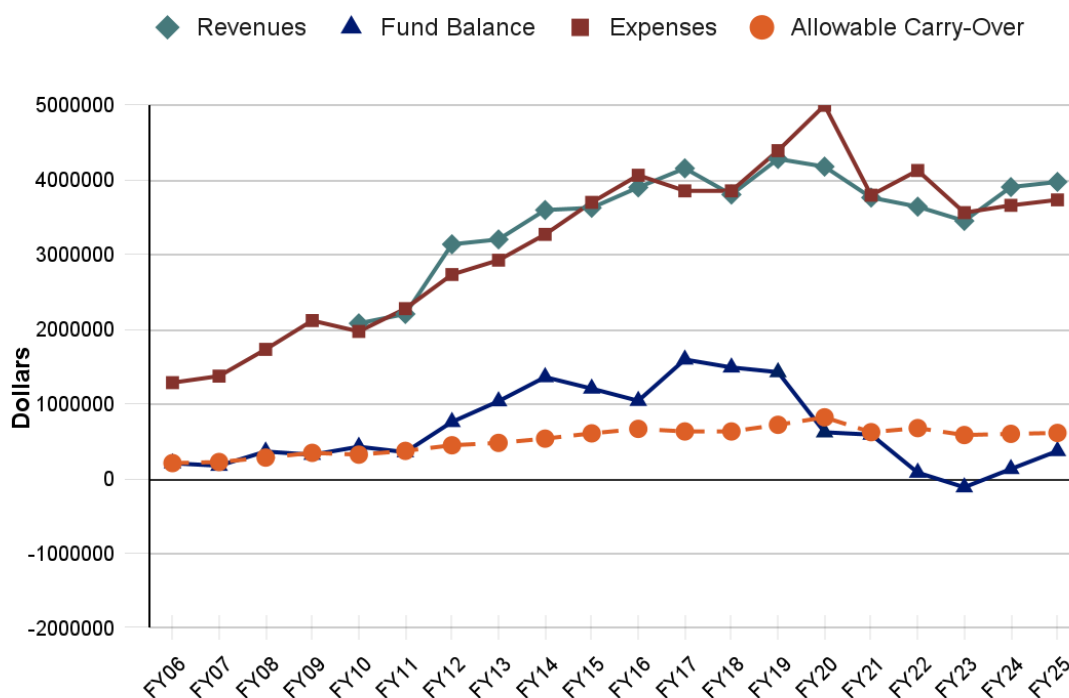


Figure 14 illustrates the revenue, expenditures, and fund balance for the portion of the program covered by the SWUF assessed at solid waste disposal sites. This graph shows that, if projections are correct, the program will not have adequate revenue streams to fund the program at least through FY 2024 at the current fee levels. The program initiated a stakeholder process in November of 2023 to discuss a \$0.04 per cubic yard increase to the SWUF. The program will present the proposal for rulemaking to the Solid and Hazardous Waste Commission at the February 2024 hearing.

In FY 2023, the program collected \$3,453,456 in the SWUF, document review fees, and annual facility fees, while spending \$3,471,218 to fund program activities.

Staff salaries are the biggest single expense item for the program. Therefore, managing staffing levels is an important part of managing the program's budget. Over the past 12 years, the program has grown significantly, both in terms of the programs administered and the staff needed to implement those programs. However, recent retirements have left some positions vacant while solid waste volumes are monitored. The program observed an increase in permitting document review times, as a result of the inability to backfill permitting positions.

Conclusion

As discussed in this report, the Hazardous Materials and Waste Management Division has implemented an effective and efficient Solid Waste Management program, satisfying the expectations set out in HB07-1288 (Section 30-20-101.5, C.R.S.).

Key accomplishments include:

- Ensuring compliance with laws and regulations concerning the management of solid waste;
- Increasing the total number of inspections in FY 2023;
- Increasing the number of waste tires recycled and salvaged in calendar year 2022;
- Maintaining a program that is credible and accountable to the public;
- Maintaining a program that is cost effective and fiscally sound; and
- Energy savings from waste diversion that is equivalent to the energy used in 153,503 homes in a year.

The program has significantly improved both the efficiency and effectiveness of the program, and will continue efforts to improve annually.

Document information

Principal author:	David Snapp, Hazardous Materials and Waste Management Division, Solid Waste and Materials Management Program Manager
Contributing authors/ technical assistance:	<p>Hazardous Materials and Waste Management Division:</p> <p>Wolf Kray, Materials Management Unit Leader Ed Smith, Solid Waste Compliance Assurance Unit Leader Jerry Henderson, Solid Waste Permitting Unit Leader Shana Baker, Waste Tires Team Leader Brian Gaboriau, Solid Waste Admin and Waste Tire Unit Leader Justin Laboe, Solid Waste Database Manager Jace Driver, Recycling Specialist Mellik Gorton, Recycling Specialist Mike Bankoff, Beneficial Use Specialist Caren Johannes, Customer Technical Assistant Specialist</p> <p>Solid Waste and Materials Management Program staff: https://cdphe.colorado.gov/solid-waste-and-materials-management-contacts</p>
Statute:	Section 30-20-101.5(3), C.R.S.
Date:	February 1, 2024

For additional information or copies:

David Snapp, Solid Waste Management Program Manager
Hazardous Materials and Waste Management Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
david.snapp@state.co.us
(303) 692-3425