



El Dorado County Solid Waste Advisory Committee



Month XX, 2025

To: El Dorado County Board of Supervisors
From: The El Dorado County Solid Waste Management Advisory Committee
Subject: 2020-2025 Solid Waste Management Plan Five-Year Review

Executive Summary

Despite diligent efforts to implement all feasible strategies in the Solid Waste Management Plan (SWMP), the percent diversion over the last five years has not shown significant improvement. More progress is needed to meet the 75% diversion target set in the SWMP over the next five years.

Over the five-year review period, there was a decrease in the diversion rate at the El Dorado Disposal (EDD) materials recovery facility (MRF) (Table 1) and an increase in the diversion rate at the South Tahoe Refuse (STR) MRF (Table 2).

While the unincorporated areas on the west slope of El Dorado County experienced a slight increase in diversion (Table 3), the rates declined in both the City of Placerville (Table 4) and the City of South Lake Tahoe (Table 5).

The state has replaced the percentage diversion rate measure with a pounds per person per day (PPD) measure. The state's regulatory per capita disposal target is for each jurisdiction to generate no more than 50% of a state calculated PPD target. El Dorado County Unincorporated (Table 3) and the City of South Lake Tahoe (Table 5) generated fewer PPD than the state target and are thus in compliance with SB 1016/AB 939¹. The City of Placerville (Table 4) was in compliance in 2020 and 2021 but did not meet the target in 2022 and 2023.

Components of the Review

- A. Background on the SWMP
- B. Data on Diversion including State Measurement Changes
- C. Factors Impacting Diversion
- D. Most Impactful Strategies Implemented During the Five-Year Term
- E. Summary of the Current Status of the SWMP
- F. Recommendations for the Next Five Years

¹ AB 939 – Integrated Waste Management Act of 1989; SB 1016 -Diversion: Compliance: Per Capita Disposal Rate (2007 – 2008).

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A. Background on the SWMP

The El Dorado County SWMP was completed by a consulting firm and adopted by the Board of Supervisors in January 2012. The purpose of the SWMP was to identify strategies and a blueprint for increasing the County's solid waste diversion rate from an estimated 2012 baseline of 65% to 75% diversion by 2030. The SWMP recommended implementing 32 strategies with a projected diversion for 16 of these strategies. A percentage decrease in material going to the landfill was calculated in the SWMP for these 16 strategies. These strategies were categorized as either program or infrastructure strategies. Program strategies were designed to improve existing programs or initiate new programs. Infrastructure strategies involved upgrading existing facilities or constructing new facilities. Strategy implementation was scheduled over a short term, intermediate, or long term timeline. The effective implementation of all the chosen strategies was estimated to increase diversion by 7.5% over the County's 2009 diversion status.

The El Dorado County Solid Waste Management Advisory Committee (EDSWAC) was charged with reporting on the implementation and impact of the SWMP every five years. This is the reporting for the years 2020 to 2025. EDSWAC has reviewed and summarized the level of implementation for the SWMP strategies². For the most part, the strategies have been implemented or significant efforts were made toward their implementation. A few strategies were determined to be not feasible. Attachment 1 provides a detailed summary of the implementation status for all SWMP strategies.

B. Data on Diversion including State Measurement Changes

Recovery/Diversion Rates at Material Recovery Facilities

El Dorado County is served by two Material Recovery Facilities (MRFs): El Dorado Disposal (EDD) which serves the west slope and South Tahoe Refuse (STR), which serves the Tahoe Basin. Tables 1 and 2 present the inbound tons of solid waste received at each MRF, the number of tons diverted from being landfilled and the percentage of tons being diverted and/or recovered. The SWMP goal is to achieve the State's 75% Diversion Rate.

Table 1
El Dorado Disposal Materials Recovery Facility Data 2020 to 2024

Year	MRF Tons Inbound	Diverted Tons	MRF % Recovery (Diversion Rate)
2020	146,646.56	54,008.46	36.83%
2021	149,180.81	45,661.80	30.61%
2022	147,839.55	50,385.87	34.13%

² See Attachment 1

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2023	143,074.24	47,780.92	33.40%
2024	142,032.01	46,490.36	32.73%

Table 1 shows that EDD's MRF % Recovery Diversion Rate declined during the 5 year review period for this report; from 36.83% to 32.73%.

To put the MRF % Recovery Diversion Rate into historical perspective, the MRF % Recovery for the 3 years prior to the development of the SWMP (2007 – 2009) was 29.8%, 31.4%, and 31.4% respectively³. Thus, there was a slight improvement in the MRF % Recovery diversion rate during the most recent 5 years. **(CONFIRM REQUIRED)**

Table 2 shows comparable data for South Lake Refuse.

Table 2
South Tahoe Refuse Materials Recovery Facility Data 2020 to 2024

Year	MRF Tons Inbound	Diverted Tons	MRF % Recovery (Diversion Rate)
2020	115,445.10	60,008.70	50.30%
2021	131,801.10	77,480.60	58.80%
2022	146,869.00	91,235.40	62.10%
2023	166,874.00	106,754.90	64.00%
2024	131,293.70	79,560.40	60.60%

Table 2 shows a higher STR MRF % Recovery diversion rate for the Tahoe basin than the west slope. The MFR % Recovery diversion rate increased each year from 2020 until 2023 and then decreased in 2024. The reason for the lower diversion rate in 2024 is being analyzed by STR. One factor may be that customers are adjusting to the state mandated 3-cart system which began in October 2024.

To put the STR MRF % Recovery Diversion Rate into historical perspective, the MRF % Recovery for the 3 years prior to the development of the SWMP (2007 – 2009) was 37.3%, 44.0%, and 39.3% respectively³. Thus, there was a modest improvement in the STR MRF % Recovery diversion rate during the most recent 5 years reviewed in this report as compared to the 3 years prior to the development of the SWMP.

Changes in State Reporting for Solid Waste Diversion

³ El Dorado County Solid Waste Management Plan, Volume II, "Detailed Strategies and Support," Section 2, "Profile of County Solid Waste System," pages 2-9, Table 2-6, "El Dorado County Material Recovery Facility Diversion," January 23, 2012.

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Since the SWMP was developed, the State has changed its measurement from a percent diversion rate to a state calculated PPD disposal rate. To monitor the impact from implementing the SWMP, data is monitored for PPD and a locally calculated percent diversion rate. Attachment 2 provides background on PPD.

CalRecycle calculates PPD targets for EDC Unincorporated (west slope), the City of Placerville and the City of South Lake Tahoe. Tables 3 through 6 illustrate the calculated PPD and equivalent diversion rates. A jurisdiction meets CalRecycle's requirement by achieving a 50% diversion rate. A 75% PPD solid waste diversion rate is provided in Tables 3-5 to reflect the SWMP's 75% diversion goal.

Table 3
El Dorado County Unincorporated PPD Disposal and Diversion Rate

Year	PPD Disposed	PPD Target @ 50%	Calculated % Diversion
2020	4.2	5.3	60.31%
2021	4.2	5.3	60.63%
2022	4.0	5.3	62.72%
2023	4.0	5.3	62.25%

To meet the 75% diversion target for El Dorado County Unincorporated, the average PPD would need to be 2.6 pounds per person per day.

Table 4
City of Placerville PPD Disposal and Diversion Rate

Year	PPD Disposed	PPD Target @ 50%	Calculated % Diversion
2020	6.2	6.9	54.88%
2021	6.0	6.9	56.25%
2022	7.2	6.9	47.42%
2023	7.2	6.9	47.98%

To meet the SWMP's 75% diversion target for the City of Placerville, the average PPD would need to be 3.4 pounds per person per day.

Table 5
City of South Lake Tahoe PPD Disposal and Diversion Rate

Year	PPD Disposed	PPD Target @ 50% ⁴	Calculated % Diversion
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⁴ The PPD target in South Lake Tahoe is tricky because the visitor population can far exceed the resident population during peak summer and winter seasons, particularly on weekends and holidays. At peak times, South Lake Tahoe can have hundreds of thousands of visitors per day. The resident population is 21,319

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2020	7.4	9.4	60.62%
2021	7.8	9.4	58.33%
2022	8.4	9.4	55.54%
2023	9.3	9.4	50.71%

To meet the SWMP's 75% diversion target for the City of South Lake Tahoe, the average PPD would need to be 5.7 pounds per person per day.

El Dorado County Unincorporated and the City of South Lake Tahoe were in compliance with the state required 50% PPD rate for the years 2020 to 2023. The City of Placerville was in compliance in 2020 and 2021 but did not meet the target in 2022 and 2023. The calculated 75% diversion rate target in the SWMP was not met for any of prior years for any of the jurisdictions.

C. Factors Impacting Diversion

Over the last five years, there have been several significant external events that have impacted the waste stream and diversion efforts. These events include Covid-19 lockdowns (2020 to 2022) and significant fires (Caldor in 2021, Mosquito in 2022, and Crozier in 2024).

With the focus on diverting the weight (not volume) of materials in the PPD measure, the most effective way to increase the pounds of material diverted from the landfill is by focusing on the materials that are heaviest. Yard waste and organics are much heavier than recycled materials. For example, the weight of recycled materials for the first quarter of 2025 for STR was 652.9 tons and the green/organic waste had almost double that weight at 1,273.6 tons. STR estimates that it takes 1,000 tons of increased diversion to increase diversion by 1%. Another heavy material that goes through MRFs is construction and demolition (C&D) material. A focus on diverting green/organic waste and C&D is more effective in reducing PPD than targeting on all recyclable materials equally.

On the West Slope and East Slope there is less on-site sorting at MRFs to take recyclable materials out of trash carts than in previous years. Less sorting by MRF staff on the West Slope is due to inadequate facility capacity for a sort line. The new upgrades to the West Slope MRF have increased the sorting capacity for materials directly delivered by residents or businesses to the MRF. Additional space is also used for the larger C&D sort-line and shredder from Wetsel-Oviatt. The 3-cart system requires more facility area than the former blue bag recycling system. Without space for on-site sorting by staff, for the most part, materials incorrectly placed in the trash cart by residents or businesses are landfilled.

(Census, ACS 2023). The calculated PPD can include employment data, but the calculated PPD targets were not necessarily designed for high tourist areas.

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In South Lake Tahoe, the transition to a 3-container system under the State's SB 1383 requirements has resulted in putting responsibility for placing materials in the proper cart on the residents. STR has labeled each cart with the acceptable and unacceptable materials and provided extensive education to customers as they navigate the transition. South Tahoe Refuse continues to sort through commercial bins to capture recycling.

Increasingly, the new system relies on residents and businesses to make informed recycling decisions about what belongs in the recycling cart, green waste/organics cart, the trash cart or needs to be taken to the MRF for appropriate disposal/diversion. To increase diversion, recyclable materials must enter the appropriate recycling stream.

The last year EDD conducted manual sorting of trash by trained staff at the MRF to pick out recyclable materials was 2009. Data from 2009 for the West Slope shows that diversion rates were higher when manual sorting was in place at the MRF. In 2009, PPD for El Dorado County unincorporated was 3.8 and 3.2 PPD for the City of Placerville. This is lower than the 2023 PPD rate of 4.0 for El Dorado County unincorporated and 7.2 for the City of Placerville.

As shown in Table 5, diversion rates in SLT were 60.62% in 2020 and decreased each year thereafter. The diversion rate was 50.71% in 2023. STR is analyzing factors contributing to the decrease in the diversion rate. STR began rolling out the 3-cart system in October 2024. It is too soon to know the impact from the 3-cart system since residents are adjusting to it and education on the new system is continuing.

The SWMP stated that the baseline diversion rate for El Dorado County was 65% (2010). However, this rate was calculated prior to a time of significant transition. In 2010, residents were instructed to place questionable items in the recycling bin if they were unsure if a material was recyclable. At this time, about one-third of collected "recycled" materials from the U.S. were being transported for processing to developing countries. By 2018, these countries began rejecting U.S. recycling materials due to the high contamination rate from non-recyclable materials. Without the option of shipping to international markets, recyclable materials were instead sorted and processed in the U.S. The facility which receives recycled material from the West Slope of El Dorado County initially reported a 27% contamination rate for the "recycled" materials it received.

Using baseline data in the SWMP (Table 3-4, page 28, Volume II), we can identify that 32.9% of the waste stream at the time when the 65% baseline was established consisted of mixed recycling (paper, glass, metal and plastic). Given that the facility receiving recyclable materials at this time reported a 27% contamination rate, some of the material that was reported to be recycling was actually non-recyclable garbage.

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An approximate recalculation of the baseline, adjusting for this contamination, results in a more accurate diversion rate of 56.12%. The salient point is that the diversion rate of 65% used in the SWMP was inflated.

Following is the list of SWMP strategies that were not implemented and the reason for not implementing⁵.

- Strategy 1.1 was to “Create a West Slope JPA”. The thinking was that this would support other diversion efforts. The agencies who would have been members of the JPA declined to join so the JPA was not created. Lack of interest in a JPA was confirmed again in May 2025. This strategy was not expected to increase diversion.
- Strategy 1.4 “Expand Mandatory Residential Collection Ordinance” was projected to have a 3.1% diversion increase. EDSWAC believes that the decision to consider or implement this strategy should be made by the Board of Supervisors.
- Strategy 2.14 was to “Prepare for Possible Elimination of Residential Yard Waste Burning on the West Slope”. This strategy was not expected to increase the percentage of diversion. Given the increased fire risk in the county and requirements to clear property for fire insurance, EDSWAC questions that this strategy is reasonable for larger properties and properties with slopes that would make it difficult to transport yard waste. If the Board of Supervisors would like to proceed with implementing this strategy, EDSWAC suggests that clear guidelines would be needed to define the residential properties to be included/excluded.
- Strategy 2.2 was to “Use Greater Pay-As-You-Throw (PAYT) Pricing Programs”. This was expected to have a one-time cost of \$25,000 to \$40,000 for a study and was projected to increase diversion by .2%. EDSWAC recommends that this is a state level strategy, not a county level strategy.
- Strategy 3.2 was to “Develop A West Slope EcoPark”. The SWMP identified this strategy as having the greatest impact with a projected 7% diversion rate and the greatest cost at \$24 to \$39 million. Funds were not designated for the EcoPark. To support the cost of an EcoPark, there would need to be a regional facility. If there was interest to pursuing this strategy, the cost identified in 2012 would need to be adjusted for current construction costs. This strategy was not implemented due to the significant cost that would be borne by rate payers.

⁵ The status of all strategies is listed in Attachment 1.

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- Strategy 3.3 “Re-Open Union Mine Landfill” was included in the SWMP but this strategy was not projected to increase the percentage of diversion and is not feasible from an environmental or financial standpoint.
- Strategy 3.5 was to “Develop Small Volume Rural Transfer Station Facilities and Strategically Placed Debris Boxes on the West Slope”. There was significant effort by Environmental Management Department (EMD) staff to identify potential properties and to meet with local residents to seek buy-in. There was significant resistance by local residents for all of the feasible locations. This strategy was deemed to not be feasible. This strategy was not expected to increase the percentage of diversion.

D. Most Impactful Strategies Implemented During the Five-Year Term

There were two strategies which were implemented that have the potential to further increase diversion. The first strategy was completion of the modernized Transfer Station/ Material Recovery Facility by El Dorado Disposal (EDD). The second strategy is implementation of recent state laws, which includes the development, initiation and implementation of SB 1383 Organic Waste Management Programs.

Impacts of EDD’s Modernized Transfer Station/ Material Recovery Facility

Renovation of the El Dorado Disposal Material Recovery Facility has had several impacts.

The reconstruction of traffic flow has allowed the facility to implement two active gatehouse stations where material is identified, and customers are directed accordingly. When necessary, the MRF has the capability of operating a third gatehouse station that is essentially mobile and offers the ability to serve customers with a handheld device for debit/credit cards, which has effectively lessened waiting times and allowed for more efficient throughput of customers while also mitigating complaints regarding waiting times.

The new transfer building design incorporates two bays for organics material (yard waste) dedicated for public use and between seven and fourteen bays for public municipal solid waste (trash). Additionally, the transfer building includes a C&D operation that shreds waste for alternative daily cover. The overall expansion of the transfer building ultimately enables improved customer throughput while allowing for receipt of increased material volume. Lastly, the new transfer building enables the separation of public and commercial traffic, enhancing safety for all users.

The MRF improvements also include a free recycling drop off area. Customers can now bring a wider variety of electronic waste and dispose of a broader range of materials at no cost. As part of the MRF upgrades, the Household Hazardous Waste (HHW) facility has

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been expanded to enhance both capacity and the safety of waste handling. Textile collection has also been re-introduced to the MRF. Overall, residents can now bring a wider variety of materials to the MRF, which is already diverting a greater and broader range of material from being landfilled.

Implementation of State Mandated Programs

California approved multiple solid waste laws. These laws mandate programs that are aligned with SWMP strategies. El Dorado County is implementing the following laws:

- Mandatory Commercial Recycling (AB 341)
- Mandatory Organics Recycling (AB 1826)
- Short-Lived Climate Pollutants (SB 1383)

California's SB 1383, which went into effect in 2022, establishes ambitious targets to reduce emissions of short-lived climate pollutants. The regulations outline specific requirements related to organics collection, edible food recovery, and compliance tracking and monitoring, and mandate significant action by local jurisdictions, residential and commercial organics generators, haulers, and facilities to significantly reduce organics landfill disposal.

Achieving compliance with SB 1383 has been a multi-year effort for the County and haulers. With such a sweeping mandate, the diversion program development has almost exclusively been focused on organics for the past several years.

Haulers and the County have worked diligently to expand capacity for source-separated material, identify appropriate outlets for the material, explain the requirements to residential and commercial customers, evaluate businesses for compliance, provide outreach, purchase new containers and equipment, modify collection routes and monitor the waste stream for contamination.

In addition, jurisdictions across the state, including El Dorado County, have been devoting extensive time and resources to meet other components of SB 1383, such as edible food recovery goals, organic material procurement requirements, and extensive recordkeeping.

The result of implementation efforts is that organics diversion rates are increasing. On the east slope, for example, from 2021-2024 organic recycling increased by 24%, and is expected to continue to rise. The tons of organics being diverted has also increased on the west slope. For 2024, EDD reports that 24,411.03 tons of organics were diverted.

SB 1383 requires continued focus on organics programs for years to come, but as of

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2025, many of the necessary systems have been put into place. Moving forward we expect to continue to see increases in organic diversion tonnage.

E. Summary of the Current Status of the SWMP

All 32 strategies designated for implementation in the SWMP action plan have either been implemented or determined to be non-feasible and not subject to future consideration at this time. Implemented program strategies continue to be maintained and revised through existing County policies, procedures and ordinances. After 13 years of implementing the 32 strategies in the SWMP action plan, the existing SWMP essentially becomes an archivable document. Since the County has not yet achieved the State 75% diversion goal, the formal solid waste management/diversion, EDSWAC recommends continuing to work on meeting the goal.

EDSWAC does not recommend that the County contract with a consulting firm to prepare a revised SWMP document. The County has capacity for continuing the solid waste management planning process that it has been implementing over the past 13 years under the current SWMP process.

EDSWAC recommends the County continues to develop focused strategies and implement documented, detailed solid waste diversion strategies in accordance with the criteria and guidelines provided in the current SWMP. The strategy planning criteria and documentation template presented in Volume II of the SWMP should continue to be used as the basis for maintaining and improving the County's solid waste diversion in the future. The original SWMP should be used as the bedrock for a continuous improvement process to drive future waste diversion progress, rather than as a static, outdated document. Future selected waste diversion strategies and implementation schedules should be documented and maintained as appendices to the original SWMP document.

We did not discuss this and I think it significantly overstates the value of what I see as a mediocre boilerplate document that was never specific or focused enough to really help us to meet our goals. We already addressed in the next section that we need a data management plan that is focused on a few strategies to make progress. We don't need to repeat this here.

F. Recommendations for the Next Five Years

EDSWAC does not recommend that the county contracts with a consulting firm to develop a revised SWMP when the current plan sunsets in 2030. Instead, we recommend that EDSWAC continues to provide five-year review reports to the Board of Supervisors.

Recommendations to increase diversions

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1. Focus on organics recycling as mandated.
2. Our waste disposal system is increasingly more reliant on residents and businesses being informed about where to dispose of materials to increase diversion from the landfill. Significantly increase targeted public education on where and how to dispose of or divert materials from being landfilled and make it easy for the public to divert materials. For example, provide labels on carts to clearly identify what should go in each cart and provide a bar code to make it easy to get more information from a recycling wizard link.
3. Continue to do waste stream characterization studies to understand the materials that are headed to the landfill that could be diverted for recycling. Use findings for public education.
4. Expand the use of technology or personnel to increase diversion of materials that would otherwise be landfilled. The use of cameras on EDD trucks to give feedback to residents has been a helpful first step.
5. Implement a local data tracking system to get more real-time data on diversion rates and trends. Having our own data system is important because there is an 18-month lag time in state data reporting. This data should include the pounds landfilled from RDRS reports.

Recommendations for Consideration by the Board of Supervisors

EDSWAC recommends that the BOS consider implementing SWMP Strategy 1.4 Expand Mandatory Residential Collection Ordinance and Strategy 2.14 Prepare for Possible Elimination of Residential Yard Waste Burning on the West Slope.

Attachments

1. SWMP Strategy Status
2. PPD Disposal Rate Assessment