

JOSH GREEN, M.D.  
GOVERNOR OF HAWAII  
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAII



DEPT. COMM. 10-254  
KENNETH S. FINK, M.D., M.P.H., M.G.A.  
DIRECTOR OF HEALTH  
KA LUNA HO'OKELE

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
File:

December 24, 2024

The Honorable Ronald D. Kouchi,  
President and Members of the Senate  
Thirty-third State Legislature  
State Capitol, Room 409  
Honolulu, Hawaii 96813

The Honorable Nadine K. Nakamura,  
Speaker  
and Members of the House of  
Representatives  
Thirty-third State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Annual Report of the Office of Solid Waste Management, pursuant to Section 342G-15, Hawaii Revised Statutes.

In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at:

<https://health.hawaii.gov/opppd/departments-of-health-reports-to-2025-legislature/>

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Fink", written over a light blue circular stamp.

Kenneth S. Fink, M.D., M.P.H., M.G.A.  
Director of Health

Enclosures

c: Legislative Reference Bureau  
Hawaii State Library System (2)  
Hamilton Library

**OFFICE OF SOLID WASTE MANAGEMENT  
ANNUAL REPORT TO THE THIRTY-THIRD LEGISLATURE  
STATE OF HAWAI'I  
2025**

PURSUANT TO SECTION 342G-15, HAWAI'I REVISED STATUTES,  
REQUIRING THE OFFICE OF SOLID WASTE MANAGEMENT TO GIVE AN  
ANNUAL REPORT ON SOLID WASTE MANAGEMENT

PREPARED BY:

STATE OF HAWAI'I  
DEPARTMENT OF HEALTH  
OFFICE OF SOLID WASTE MANAGEMENT  
December 2024

## I. INTRODUCTION

The Office of Solid Waste Management (OSWM) provides an annual report to the Hawai'i State Legislature to describe progress towards the State's waste reduction goals for the State Fiscal Year (FY) 2024 (e.g., July 1, 2023 – June 30, 2024). The OSWM is part of the Department of Health's (DOH's) Solid and Hazardous Waste Branch (SHWB) and administers the Deposit Beverage Container (DBC) Program, the Electronic Waste and Television Recycling and Recovery Program, and the Glass Advance Disposal Fee (ADF) Program. These three programs play an instrumental role towards achieving the State's waste reduction goals.

## II. SOLID WASTE MANAGEMENT PRIORITIES AND PRACTICES

Hawai'i Revised Statutes (HRS) Section 342G-2 requires the DOH and the counties to consider solid waste management practices and methods in the following order of priority:

- 1) Source Reduction
- 2) Recycling (to include bioconversion)
- 3) Landfilling and/or incineration

Successfully implementing the first two practices reduces the amount of waste that is landfilled or incinerated.

### Source Reduction

HRS Chapter 342G-1 defines *source reduction* as “the design, manufacture, and use of materials to (1) minimize the quantity or toxicity, or both, of the waste produced; and (2) reduce the creation of waste either by redesigning products or by otherwise changing societal patterns of consumption, use or waste generation.” Source reduction, also called “waste prevention” or “waste reduction,” aims to decrease the amount of material that may become waste by creating or importing less of it into the State. Quantifying source reduction is inherently difficult. While sometimes it's possible to compare waste levels before and after implementing a source reduction practice, most often, the amount of waste reduced can only be estimated. This is because source reduction aims to prevent waste from being generated in the first place, making it difficult to establish a clear baseline for comparison.

### Recycling

“Recycling” is defined by statute as “the collection, separation, recovery, and sale or reuse of secondary resources that would otherwise be disposed of as municipal solid waste and is an integral part of a manufacturing process aimed at producing a marketable product made of postconsumer material.” It is the process by which materials are collected and reprocessed as “raw” materials to create new products. Recycling is the most easily quantified waste diversion activity because an actual material amount can be calculated. While data from state-permitted recycling facilities is regularly collected, it can be difficult to obtain data from facilities without state or county regulatory oversight, as providing this information is not mandatory.

Hawai'i's commercial recyclers contend with significant issues. Because of the State's small population, and a corresponding small economy, much of the State's recyclable materials are shipped out of the State to recycling processors that can better manage the materials cost-effectively. Materials such as steel, automobile lead acid batteries, aluminum and plastics are shipped to either the U.S. mainland or Asia; while materials such as asphalt and concrete are recycled locally.

Other challenges include high land values (which translate to high lease costs for recyclers), labor costs, and other overhead expenses like utilities and specialized equipment. Volatility in the recycled materials markets (e.g., China's ban on most recyclable plastics in 2018 and other global plastic import bans) is an issue that recyclers nationwide have had to manage. However, Hawai'i's recyclers are disproportionately impacted by any market fluctuations because of thinner profit margins as a result of higher overhead and transport costs.

### Bioconversion

"Bioconversion" is the process by which organic waste is managed through biological or chemical means like biogasification, pyrolysis, and fermentation. In Hawai'i, the most common bioconversion process is composting green waste (tree trimmings, grass clippings and similar material). Composting is considered a recycling activity and reported composting weights are included as part of the "Recycling" column in Table 1, below.

### Reuse

Although not identified as a priority, OSWM also promotes reuse activities. "Reuse" means using a product again without first having to reprocess it. The product may be used for its original or intended use or may be used in a different capacity. Reuse of products or materials is also difficult to quantify. It is possible to measure reuse by counting the units of a product being reused or by quantifying tonnage, but effectively measuring reuse is impracticable because it takes place at so many levels and on an unregulated and widespread scale. Donating usable, unwanted furniture or clothing to charitable organizations for distribution to those in need; using reusable plates and utensils instead of disposable ones; or reusing a plastic kalua pig container to hold a dishwashing sponge or a glass kim chee jar to store pickled cucumbers are examples that contribute to waste reduction but are impossible for the State to accurately measure.

### Waste Diversion

In 1991, the State Legislature passed Act 324, codified as HRS Chapter 342G, which included an ambitious waste diversion goal of 25% by 1995. This was similar to the United States Environmental Protection Agency's (EPA) national goal of 25% at the time, although HRS Chapter 342G also increased the State's waste diversion goal to 50% by 2000. In November 2020, the EPA revised its national goal to 50% by 2030. This is the first revision of the goal since 1996. The national rate in 2018 was 32% (the most recent year for which data is available). The State faces similar challenges with improving its waste diversion goals.

The diversion rates presented below in Table 1 are based on data collected by the DOH from permitted solid waste management facilities.

**Table 1: Waste Diversion for FY2024 (tons)\***

County	Generation	Diversion	Disposal	Diversion Rate	Incineration
Hawai'i	324,495	105,708	218,787	32.6%	n/a
Maui	373,778	59,935	313,842	16.0%	n/a
Honolulu**	1,691,009	467,856	1,223,154	65.8%	644,266
Kaua'i	120,898	30,714	90,184	25.4%	n/a
State	2,510,180	664,213	1,845,967	26.5%	644,266

\*Data are sourced from permitted solid waste management facility reports and some recycling data is incomplete. The DOH continues to collect data and will provide updates in subsequent legislative reports.

Differences in recycling rates from those published by the counties are attributed to different data collection processes and differences in the classification of recycling and landfill diversion activities as defined by statute.

\*\*By definition, the City and County of Honolulu's disposal tonnage also includes incineration tonnage. This amount is also separately quantified in the last column.

**Table 2: Solid Waste Diversion Rates from FY2020 to FY2024**

County	FY2020	FY2021	FY2022	FY2023	FY2024
Hawai'i	25.4%	32.8%	30.5%	30.5%	32.6%
Maui*	67.9%	13.2%	14.2%	14.2%	16.0%
Honolulu	19.7%	28.4%	25.8%	25.8%	27.7%
Kaua'i	30.4%	30.1%	31.7%	31.7%	25.4%
State	<b>25.4%</b>	<b>27.1%</b>	<b>24.8%</b>	<b>24.8%</b>	<b>26.5%</b>

\*The County of Maui's diversion amount is significantly higher in FY2020 due to a one-off construction project and lower in FY2021 due to the closure of a composting facility.

HRS Section 342G-01 defines "waste diversion" as diverting waste from waste disposal facilities through recycling or bioconversion programs. Incineration of waste is not considered recycling, and HRS Section 342G-01 specifically exempts incineration as an acceptable method of processing solid waste under bioconversion. However, to provide a complete picture of what is being redirected from waste disposal facilities, Table 3 presents rates that combine both diversion and incineration tonnage.

**Table 3: Solid Waste Diversion + Incineration Rates from FY2020 to FY2024**

County	FY2020	FY2021	FY2022	FY2023	FY2024
Hawai'i	25.4%	32.8%	30.5%	30.5%	32.6%
Maui	67.9%	13.2%	14.2%	14.2%	16.0%
Honolulu	67.0%	64.9%	69.7%	69.7%	65.8%
Kaua'i	30.4%	30.1%	31.7%	31.7%	25.4%
State	<b>60.2%</b>	<b>53.2%</b>	<b>54.3%</b>	<b>54.3%</b>	<b>52.1%</b>

### State Integrated Solid Waste Management (ISWM) Plan

In FY2022, OSWM released a Request for Proposals (RFP) to update the 2000 State ISWM Plan. Tetra Tech BAS, Inc. (Tetra Tech) was awarded the contract, and the contract was executed in October 2022. While the contractor is tasked to draft the updated plan, the OSWM-assembled State Integrated Solid Waste Management Task Force whose members represent county government, solid waste management and recycling businesses, and environmental groups, provided feedback during the plan revision process. Topics discussed included tires, batteries, photovoltaic panels, organic waste, construction waste, packaging, carpet, mattresses, disaster debris, and the review of the state's three existing recycling programs. The first of nine Task Force meetings was held on May 25, 2023, with the last meeting on August 9, 2024. As of December 2024, Tetra Tech is in the process synthesizing information gathered from the Task Force, OSWM and their own research to draft the plan document. Information on the planning process can be accessed on the DOH's website at: <https://health.hawaii.gov/shwb/2023-state-integrated-solid-waste-management-revision/>.

### **EPA Solid Waste Infrastructure for Recycling Grant (SWIFR)**

In August 2023, OSWM was awarded an EPA SWIFR grant of \$673,000 to conduct a statewide waste characterization study. The study will provide data on the types of materials in the waste stream that will inform county and state planning for both waste disposal and recycling programs. OSWM released an RFP in December 2023 and selected Tetra Tech as its contractor. As of December 2024, the contract is in the process of being finalized.

## **III. OSWM ACTIVITIES**

### **Deposit Beverage Container Program**

The State's FY2024 Deposit Beverage Container (DBC) Program annual redemption rate was 54.82%, accounting for approximately 538 million containers recycled. The DBC Program's redemption rate is a measure of the program's effectiveness to promote: (1) collecting and redeeming eligible deposit beverage containers; and (2) recycling DBC materials. It is calculated by dividing the number of DBC redeemed by the number of DBC sold.

$$\text{FY2024 Redemption Rate: } \frac{537,984,054}{981,302,333} = 54.82\%$$

FY2024 saw a continuation in the decline of the redemption rate that began in FY2022. Since FY2021 the redemption rate has gone from 63.08% to 59.87% in FY2022 to 54.82% in FY2024.

For FY2022, we hypothesized that the drop in redemption rate was due in part to the economy's recovery from the COVID-19 pandemic and the resultant increase in the number of containers imported into Hawaii. However, the fairly level number of imported containers from FY2022 (1.022 billion) to FY2023 (1.024 billion) indicates decreased redemption rate results mainly from the decreased number (over 38 million) of containers redeemed in FY2023.

OSWM has considered other factors that potentially impacted the redemption rate two years ago. One issue is the closure of several redemption centers on the Island of Hawai'i. The tight labor market has made it difficult for redemption centers to operate reliably, to the point that a County of Hawai'i solicitation released last year that would subsidize redemption center operations at county transfer stations received no interest and no bids. Due to staff shortages, redemption centers sometimes close at the last minute, increasing the difficulty for the public to reliably redeem empty beverage containers. Between FY2022 and FY2023, approximately 15 million fewer containers were redeemed on the Island of Hawai'i. OSWM continues to have discussions with the County of Hawai'i to develop solutions, including increasing their funding, to improve the reliability of redemption center operations.

Another issue identified is the current segregated rate. In 2007, OSWM conducted a study to develop a faster alternative to counting redeemed containers by hand, known as the segregated rate, by surveying and averaging the number of plastic containers per pound per transaction (study link: [https://health.hawaii.gov/hi5/files/2013/05/seg\\_rate\\_final\\_report1.pdf](https://health.hawaii.gov/hi5/files/2013/05/seg_rate_final_report1.pdf)). At the time that the study was conducted, it appears most recyclable plastic containers redeemed were used for carbonated beverages. Because of the carbonation, the plastic container walls needed to be thicker to prevent the bottles from bursting during shipping. However, recent consumer trends have shifted consumption patterns away from carbonated sodas to water. Plastic water bottles are significantly thinner and lighter than soda bottles because the product is not carbonated, and the walls do not need to be reinforced to handle the carbonation during transit. This negatively affects the redemption rate, as one empty 16.9 oz Coca-Cola bottle weighs the

same as a couple of empty 16.9 oz Kirkland water bottles. OSWM will be reassessing and issuing revised segregated rates in 2025 that will address the changes to beverage containers that have taken place since the last revision.

**Table 4: DBC Program FY2024 Revenues & Expenditures**

<b>FY2024 Appropriation Ceiling</b>	<b>\$71,219,367.00</b>
<b>Revenue</b>	
- Distributor Payments	\$58,214,358.15
- State Investment Pool Account	\$2,338,935.17
- Restitutions	\$1,100.00
- Vacation Earned with Other Funds and Agencies	\$28,184.01
<b>Total Revenue</b>	<b>\$60,582,577.33</b>
<b>Expenditures</b>	
<b>Program Administrative Costs</b>	
- Payroll	\$ 468,755.67
- Fringe	\$ 327,889.97
- Office Equipment, Supplies, & Other Miscellaneous Services	\$ 34,156.19
- Office of the Attorney General - Services	\$ 18,197.12
<b>Subtotal Program Administrative Costs</b>	<b>\$ 848,998.95</b>
<b>Contracts</b>	
- Redemption Center Reimbursement Payments	\$26,987,630.63
- Redemption Center Contract Balances (Encumbered Funds)	\$33,928,334.37
- County Recycling Program Payments	\$ 239,316.05
- County Recycling Program Contract Balances (Encumbered Funds)	\$ 752,703.36
- Other Contract Payments	\$ 205,200.00
- Other Claims Balances (Encumbered Funds)	\$ 68,400.00
<b>Subtotal Contracts</b>	<b>\$62,181,584.41</b>
<b>Central Services Administration</b>	<b>\$ 409,096.71</b>
<b>Total Expenditures*</b>	<b>\$63,439,680.07</b>

\*Redemption center contracts are paid as reimbursements for redeemed beverage containers and OSWM encumbers a surplus estimated amount to ensure prompt reimbursements without the need for additional contract modifications and inherent administrative processing delays. Additionally, the current reported overage is also attributable to the fact that all redemption center reimbursement contracts are twelve-month contracts that are offset from the State's fiscal year. They start on October 1 and end on September 30 of the following year to prevent contract delays and related redemption center shutdowns at the start of the State fiscal year. It is expected that the Total Expenditures for the fiscal year will be less than Total Revenue when unspent balances are unencumbered and the fund is reconciled.

OSWM continues to implement strategies to address issues identified in the State Auditor's report, dated December 31, 2021. In addition to actively recruiting and filling vacant positions, OSWM has also spent considerable time and resources updating its data management tools, improved its tracking and oversight of redemption center container redemptions, and instituted requirements for fraud prevention plans for all redemption centers. Act 012, signed into law in 2022, will further aid OSWM with meeting the Auditor's recommendations by ensuring that distributors properly account for the containers imported into, or manufactured in, the State.

After forgoing initial plans to revise its administrative rules, OSWM is implementing the audit requirements of Act 012 in 2025

### **Electronic Waste and Television Recycling and Recovery Program**

The Hawai'i Electronic Waste Recycling Act was adopted in 2008 and created a recycling program for computers, portable computers, computer monitors and computer printers. Products covered by this statute were considered "Covered Electronic Devices" (CEDs). Subsequently, the Hawai'i Electronic Waste and Television Recycling and Recovery Act was adopted in 2009 and expanded the program to cover televisions. Products covered under this portion of the law were termed "Covered Televisions" (CTVs). The Act required manufacturers to register with OSWM and submit recycling plans annually to the DOH. The plans describe how each manufacturer intends to collect and recycle used CED and CTV products. Table 5 indicates the number of manufacturers registered with the DOH by year. The program has been managed by OSWM since its inception and has provided funding to the counties of Hawai'i, Maui and Kaua'i to maintain county electronic waste collection programs to collect and recycle devices not captured by manufacturer programs.

### **Funding of County Electronics Recycling Programs**

Counties have made electronic waste diversion from landfilling a high priority and developed programs prior to the enactment of the State law. However, most of the collection programs had been drastically scaled back because of budget constraints.

New electronics recycling services for the general public became available in response to the law. The most comprehensive programs were centered on O'ahu with recyclers accepting all brands of electronics free of charge and even accepting items not covered by the law. Comprehensive services are centered on O'ahu because of its population concentration. OSWM provided funding to the counties of Hawai'i, Maui and Kaua'i to maintain county electronic waste collection programs. Additionally, various manufacturers also paid the shipping costs for electronics collected through these periodic waste collection efforts on the neighbor islands.

### **Act 151 Electronic Device Recycling and Recovery Law**

During the thirty-first Legislative Session, amendments to the Electronic Waste and Television Recycling and Recovery Program were passed and signed into law (Act 151) by Governor David Y. Ige on June 27, 2022. These amendments include combining the covered electronic devices with the covered televisions, to create one category called electronic devices. Electronic devices include computers, monitors, portable computers (laptops/tablets), printers, and televisions. Act 151 also changed the registration fee to \$5,000 for electronic device manufacturers.

Starting on January 1, 2023, electronic device manufacturers were required to fully fund their recycling programs for the collection and transportation of used devices to a certified recycler on the mainland. OSWM will continue to provide funding to the counties of Hawai'i, Maui and Kaua'i to provide public education and outreach to promote the manufacturer sponsored programs. OSWM will also work with the counties to determine if funding is needed to supplement the recycling programs sponsored by the manufacturers in remote or underserved areas.



Also starting in calendar year 2023, all electronic device manufacturers now have convenient collection requirements and recycling goals to meet. If a manufacturer does not meet their recycling goal, a \$1.50 per pound penalty shall be imposed for each pound not recycled. For 2023, the recycling goal is fifty percent of the total weight of all electronic devices a manufacturer sold in Hawai'i two years prior (2021). Setting recycling goals for all manufacturers (previously only television manufacturers had recycling goals) will increase the amount of electronics recycled in Hawai'i. As noted in Table 7 and in previous OSWM reports, many manufacturers recycled zero electronic devices in Hawai'i, despite submitting a recycling plan. Table 5 indicates the number of manufacturers registered with the DOH by year:

**Table 5: Number of Registered Manufacturers**

Calendar Year	2020	2021	2022	2023	2024
<b>CED</b>	29	57	54	54	52
<b>CTV</b>	21	22	19	n/a*	n/a*

\*Act 151 (2022) combined the covered electronic devices and covered television categories into a single covered electronic devices category.

### **Manufacturer Ranking by Pounds Recycled in 2023**

By January 1, 2010, CED manufacturers were required to establish their electronic recycling programs and by January 1, 2011, CTV manufacturers were required to establish their recycling programs in the State. Act 151 (2022) combined the "Covered Electronic Device" and "Covered Television" categories into a single "Covered Electronic Device" category.

Statute requires OSWM to rank CED Manufacturers by the number of pounds recycled. Table 6 displays the rankings for the manufacturers who reported recycling CEDs in Hawai'i. Four (4) CED Manufacturers reported recycling zero (0) pounds of CEDs in Hawai'i and are listed alphabetically in Table 7. Please note that the lag time needed to compile this data (due to the CED Manufacturer reporting deadline) causes the two-year lag in the data presented.

**Table 6: Manufacturer Ranking by CED Pounds Recycled in 2023**

Rank	Manufacturer	CED Pounds Recycled
1	Samsung Electronics America, Inc.	959,376
2	LG Electronics USA, Inc.	672,885
3	TTE Technology, Inc.	285,436
4	Dell Marketing LP	269,864
5	Hisense USA	252,773
6	VIZIO, Inc.	231,003
7	Best Buy	220,339
8	Sony Electronics Inc.	187,336
9	Apple Inc.	152,492
10	Canon U.S.A., Inc.	129,372
11	HP Inc.	127,183
12	Epson America, Inc.	123,761
13	Acer America Corporation	97,767
14	Walmart Inc.	92,134
15	Lenovo (United States) Inc.	91,170
16	ASUS Computer International	76,447

Rank	Manufacturer	CED Pounds Recycled
17	Lexmark International, Inc.	45,802
18	Amazon.com Services LLC	44,641
19	MSI Computer Corp.	42,454
20	Funai Corporation, Inc.	39,405
21	Envision Peripherals, Inc.	28,640
22	Element TV Company, LP	18,923
23	Microsoft Corporation	14,395
24	Westinghouse Electronics USA, Inc.	11,132
25	Xerox Corporation	10,305
26	TCT Mobile (US), Inc.	10,110
27	JVCKENWOOD USA Corporation	9,836
28	Sceptre, Inc.	9,418
29	Sharp Electronics	7,781
30	Ricoh USA, Inc.	7,759
31	SMART Technologies	7,652
32	Cyberpower Inc.	6,367
33	Google LLC	4,984
34	CTL	3,562
35	Planar Systems, Inc.	3,322
36	Promethean, Inc.	2,832
37	ViewSonic Corporation	2,614
38	Konica Minolta Business Solutions	2,523
39	Brother International Corporation	1,154
40	Intel Corporation	1,003
41	Panasonic Corporation of North America	953
42	BenQ America Corp.	901
43	Stratasys, Inc.	893
44	VTech Electronics North America LLC	696
45	Dynabook	188
46	Better Workspaces, LLC.	138
47	NOOK Digital LLC	37
48	Kyocera Document Solutions America	22
49	Wacom Technology Corporation	14

**Table 7: CED Manufacturers Reporting Zero Pounds Recycled in 2023**

American Future Technology Corporation dba: ibuypower
Oracle America Inc. (Oracle)
Razer Inc.
Wacom Technology Corporation
Zebra Technologies Corporation

The year 2023 was the first that had manufacturer collection goals in place along with the new requirement of manufacturer-funded recycling collections. For 2023, Electronic Device Manufacturers reported recycling 4,310,137 pounds of Electronic Devices, a 49% increase over the previous 4-year average of 2,882,490 pounds (2019-2022) (Table 8). In that time five of the

54 registered CED Manufacturers failed to meet their recycling goals and received penalties totaling \$15,305.

**Table 8: E-Waste Recycled (2019-2023 Calendar Year)**

Calendar Year	2019	2020	2021	2022	2023
<b>CED Manufacturer</b>	795,805	625,324	475,045	559,530	4,310,137
<b>CTV Manufacturer</b>	2,240,180	2,240,180	2,246,328	2,235,894	n/a
<b>Total</b>	<b>3,147,657</b>	<b>2,865,504</b>	<b>2,721,373</b>	<b>2,795,424</b>	<b>4,310,137</b>

Registered electronic device manufacturers are required to pay an annual registration fee of \$5,000. Table 9 indicates program revenue from manufacturer registration fees.

**Table 9: Electronic Device Recycling Fund Revenue**

Calendar Year	2020	2021	2022	2023*	2024
	\$486,232	\$366,066	\$263,033	\$255,000	\$260,000

\*Because registration fee revenue is reported by calendar year, 2024 revenue reflects fee payments to OSWM at time of publication.

### **Glass Advance Disposal Fee (ADF) Program**

OSWM continues to administer a statewide glass recovery program that is funded by a glass ADF. OSWM collects the fee from importers of glass container products that do not qualify as DBC (e.g., wine bottles). As required by statute (HRS §342G-85), fees (i.e., revenues) are reported on a calendar year basis. OSWM then contracts with each county to operate local glass recovery programs to divert glass from the waste stream for recycling. Per HRS §342G-84, the funds are distributed to the counties based on population. Each county is allowed the flexibility to structure its own glass-recycling program to maximize glass recycling. Program revenue by calendar year is reported in Table 10, and expenditures by fiscal year are outlined in Table 11. Table 12 details the tonnage of glass recycled by the counties as part of the Glass ADF Program by fiscal year.

**Table 10: Glass ADF Revenue**

Calendar Year	2020	2021	2022	2023	2024*
	\$746,575	\$736,207	\$808,651	\$864,288	\$945,889

\*Because revenue is reported by calendar year, 2023 revenue reflects ADF payments to OSWM at time of publication.

**Table 11: Expenditures for County Collection Programs**

Fiscal Year	2020	2021	2022	2023	2024*
<b>Hawai'i</b>	\$113,630	\$125,810	\$10,803	\$0	\$0
<b>Maui</b>	\$0 <sup>†</sup>	\$124,791	\$138,400	\$0	\$0
<b>Honolulu</b>	\$423,229	\$349,895	\$357,070	\$504,233	\$0
<b>Kaua'i<sup>‡</sup></b>	\$0	\$0	\$0	\$0	\$0
<b>State</b>	<b>\$536,859</b>	<b>\$600,496</b>	<b>\$506,273</b>	<b>\$0</b>	<b>\$0</b>

\*For FY2024, the County of Hawai'i contract is \$171,450; The County of Maui contract is \$170,590; and the City and County of Honolulu contract is \$780,960. No county invoices have yet been submitted.

<sup>†</sup>The County of Maui did not receive its allocated ADF funding due to staffing resource issues that impacted the County's ability to implement the program in FY2020 and FY2023.

<sup>‡</sup>The County of Kaua'i does not currently implement a glass recovery program.

**Table 12: County Recycled Glass (tons)**

<b>Fiscal Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024*</b>
<b>Hawai'i</b>	2,161	457	20**	0	0
<b>Maui</b>	849	466	462	0	0
<b>Honolulu</b>	2,283	1,615	2,356	3,309	0
<b>Kaua'i*</b>	0	0	0	0	0
<b>State</b>	<b>5,293</b>	<b>2,538</b>	<b>2,838</b>	<b>3,309</b>	<b>0</b>

\* As noted above, FY2024 County invoicing has been delayed. Finalized data will be reported in the 2025 Report to the Legislature.

\*\*The County of Hawai'i's ADF contractor saved collected glass for an anticipated large project in FY2023.

\*The County of Kaua'i does not currently implement a glass recovery program.

#### **IV. SOLID WASTE MANAGEMENT PROGRAM FUNDING**

OSWM collects the Solid Waste Management Disposal Surcharge (Surcharge) from the owners/operators of disposal facilities within the State. This includes all municipal solid waste and construction and demolition landfills, as well as the H-POWER waste-to-energy incinerator on O'ahu. Tables 13 and 14 detail the annual collections and expenditures of the Surcharge.

Funds are currently being used for the State's ISWM Plan update and will be used to supplement EPA grant funds to conduct a statewide waste characterization study.

The DOH recognizes the need to increase waste diversion from landfills and the challenges of new emerging contaminants such as per- and polyfluoroalkyl substances (PFAS) that requires the DOH to reevaluate the bioconversion and recycling of certain materials to protect human health and the environment. Additionally, the DOH is assessing the emerging issues with lithium-ion (Li-ion) battery waste management and disposal. Therefore, the DOH is currently working on a reorganization of the Solid and Hazardous Waste Branch to bring better focus on solid waste planning needs and on improving existing programs. As such, the DOH is also looking to utilize some of the available special funds to address these issues.

**Table 13: Solid Waste Disposal Surcharge Collections**

<b>Fiscal Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	\$524,385	\$672,967	\$508,710	\$543,136	\$445,350*

\*The decrease in surcharge revenue is an artifact of the lag in surcharge payments and their eventual deposit into the surcharge account. When payments are aligned with the fiscal year payments total an unaudited \$545,000.

**Table 14: Solid Waste Disposal Surcharge Expenditures**

<b>Fiscal Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	\$409,698	\$358,462	\$224,297	\$337,308	\$288,428