

2023 Solid Waste Interested Parties (SWIP) Meeting

Thursday, September 28, 2023

1 P.M. via Zoom

1:00	Welcome	Brad Wolbert
1:05	WA Program updates	Brad Wolbert
1:15	Rules updates	Kate Strom Hiorns
1:35	Waste and Materials Management Program financials	Michael Schmit
1:50	Diversion updates and annual recycling data	Jennifer Semrau
2:00	Environmental Enforcement Program 101	Sadie Derouin
2:30	EPA SWIFR Funding plan and timeline	Kate Strom Hiorns
2:40	Battery recycling overview	Sarah Murray
3:00	Wrap up and questions	Brad Wolbert

WA Program Updates – Brad Wolbert

Waste and Materials Management Program Director

Program Updates

- Staffing
- Budget
- Grants
- Plan Review
- Other

Rules Updates – Kate Strom Hiorns

Recycling and Solid Waste Section Chief

Rulemaking Updates

Electronics recycling and E-Cycle Wisconsin Program rule in place



- E-Cycle Wisconsin code and updates
 - More devices eligible to count toward manufacturer recycling targets
- Electronics recyclers must get a solid waste processing facility license

Recycling Rule

- Proposals that impact municipalities, materials recovery facilities, multi-family dwellings, haulers, and transfer stations
- Draft board order and economic impact analysis ready!



Recycling rule

- Updates to note:
 - RU education must include info on electronics recycling, batteries, and food waste
 - Guidelines for “adequate” recycling options at multi-family properties
 - Max 20% residual rate at MRFs
 - Owner financial responsibility required for larger MRFs

Next steps:

- Economic impact comment period open October 2-23
- dnr.wi.gov, search “proposed permanent rules” - WA-13-21
- Public hearing ~January 2024

Landfill and Solid Waste Fees Rule

- Scope statement approved by NRB in January 2023
- Rule writing and meeting with Advisory Committee through January 2024
- Develop economic impact analysis Jan-Mar 2024
- Comment periods and public hearing later 2024

Timeline

Review Comments	6-21-23 NR 500 & 504	8-16-23 NR 506 & 520	10-18-2023 NR 507 and 508	1-10-2024 NR 512, 514, 516
<p>DNR has been and will continue to review all comments submitted</p> <p>Draft code amendments posted for advisory committee</p>	<p>500 General SW Management Requirements</p> <p>504 Landfill Location, Performance, Design And Construction Criteria</p>	<p>506 Landfill Operational Criteria</p> <p>520 Solid Waste Management Fees and Financial Responsibility</p>	<p>507 Environmental Monitoring</p> <p>508 Response - Groundwater Standard Attained Or Exceeded</p> <p>512 Feasibility Reports, if time</p>	<p>512 Feasibility Reports</p> <p>514 Plan of Operation Reports</p> <p>516 Construction Documentation</p> <p>Final meeting</p>

Landfill and Solid Waste Fees Rule

- Updates to note:
 - Alternative option for landfill liner requirements
 - Performance-based option for landfill covers
 - Options for adjusting fees that have not changed since 2006

Next steps:

- Advisory Committee public meeting October 18, 9:30
- dnr.wi.gov, search “solid waste rules” – Proposed landfill rule tab
- Comments welcome anytime

WA Program Financials– Michael Schmit

Business Services and IT Section Chief

	FY20	FY21	FY22	FY23	FY24
	Actual	Actual	Actual	Actual	Estimated
Opening Balance	\$ 1,126,904	\$ 1,019,443	\$ 531,620	\$ 230,018	\$ 404,684
Revenue Sources	FY20	FY21	FY22	FY23	FY24
SW landfill license surcharge	\$ 1,119,099	\$ 1,068,239	\$ 1,090,465	\$ 1,106,000	\$ 1,088,235
SW landfill licenses	\$ 507,257	\$ 477,400	\$ 477,950	\$ 460,900	\$ 472,083
SW C & T licenses	\$ 135,964	\$ 393,323	\$ 415,729	\$ 425,823	\$ 411,625
SW Non Landfill	\$ 133,870	\$ 131,230	\$ 137,665	\$ 136,763	\$ 135,219
SW plan review fees	\$ 356,825	\$ 435,510	\$ 339,090	\$ 615,685	\$ 377,142
HW facilities licenses	\$ 96,000	\$ 83,200	\$ 70,400	\$ 83,200	\$ 83,200
HW transporter licenses	\$ 3,581	\$ 73,097	\$ 71,600	\$ 72,400	\$ 72,366
HW plan review fees	\$ -	\$ -	\$ -	\$ -	\$ -
HW manifest fee	\$ 1,518	\$ -	\$ -	\$ -	\$ -
SW Facility Oper/Mgr Cert Fees	\$ 24,700	\$ 36,689	\$ 28,540	\$ 27,050	\$ 30,760
Infectious Waste Report Fees*	\$ 39,050	\$ 41,195	\$ 45,205	\$ 42,320	\$ 42,907
Misc. (i.e. copying sales/printing/etc.)	\$ 4,770	\$ 6,490	\$ 4,236	\$ (1,032)	\$ 4,000
Total Revenue	\$ 2,422,634	\$ 2,746,373	\$ 2,680,880	\$ 2,969,109	\$ 2,717,536
Total Available: (All Revenue Sources + Opening Balance)	\$ 3,549,538	\$ 3,765,816	\$ 3,212,500	\$ 3,199,127	\$ 3,122,220
Total Expenditures	\$ (2,642,997)	\$(3,220,446)	\$(2,756,163)	\$(3,056,278)	\$(2,843,837)
Total Expenditures & Budget Lapses	\$ (2,642,997)	\$(3,220,446)	\$(2,756,163)	\$(3,056,278)	\$(2,843,837)
DOA adjustments to A/R Accounts	\$ 112,903	\$ (13,751)	\$ (226,320)	\$ 261,835	\$ 21,764
Closing Balance	\$ 1,019,443	\$ 531,620	\$ 230,018	\$ 404,684	\$ 300,147
	FY 20	FY 21	FY 22	FY 23	FY 24

Appropriation 425

*Note: Revenue for Infectious Waste category are estimated for FY19 and FY20. Data was determined using alternative methods to currently existing systems.

		(Denominator)			(Numerator)	(Ratio)
Fiscal Year	Schedule	Authorized Expenditure Level	Expenses	DOA Adjustments	PR EOY Account Balance	Actual % (PR EOY Account Bal / Auth. Exp. Level)
FY17	\$2,591,700	\$ 2,785,214	\$(2,258,606)	\$ (279,904)	\$ 246,704	8.86%
FY18	\$2,591,700	\$ 3,024,616	\$(2,740,129)	\$ 81,629	\$ 366,116	12.10%
FY19	\$2,591,700	\$ 3,213,335	\$(2,323,503)	\$ 237,071	\$ 1,126,904	35.07%
FY20	\$2,728,600	\$ 3,549,537	\$(2,642,997)	\$ 112,903	\$ 1,019,443	28.72%
FY21	\$2,728,600	\$ 3,765,817	\$(3,220,446)	\$ (13,750)	\$ 531,620	14.12%
FY22	\$2,751,800	\$ 3,212,500	\$(2,756,163)	\$ (226,320)	\$ 230,017	7.16%
FY23	\$2,751,800	\$ 3,199,127	\$(3,056,278)	\$ 261,835	\$ 404,684	12.65%
FY24 - estimated	\$2,758,500	\$ 3,122,220	\$(2,843,837)	\$ 21,764	\$ 300,147	9.61%

Solid Waste Program Revenue

Michael Schmit

Business Support and IT Section Supervisor

Annual update per NR 520.04(1)(d)(5)

Diversion Updates & Annual Recycling Data – Jennifer Semrau

Waste Reduction and Diversion Coordinator

Diversion Updates: Recycling Hot Projects

- Recycling Rule Revision
- State SWIFR grant, Recycling Education and Outreach Grant
- Recycling Grant application- deadline approaching
- Recycling Excellence Awards
- Recycling/Non-Landfill Team LTE
- Council on Recycling- new member
- Battery management, education and policy options
- Recycling data...

2022 Recycling Responsible Unit Annual Report

1,083 RUs in 2022, 1,048 received recycling grant

Transitioned to new reporting system

**~406,000 tons (136 lbs per capita) mandatory
recyclables reported**








24 On probation, 1 NON for failure to report by deadline

11 Off probation from RY21, no financial penalties

Significant decrease in data reporting errors

Final data available at later date

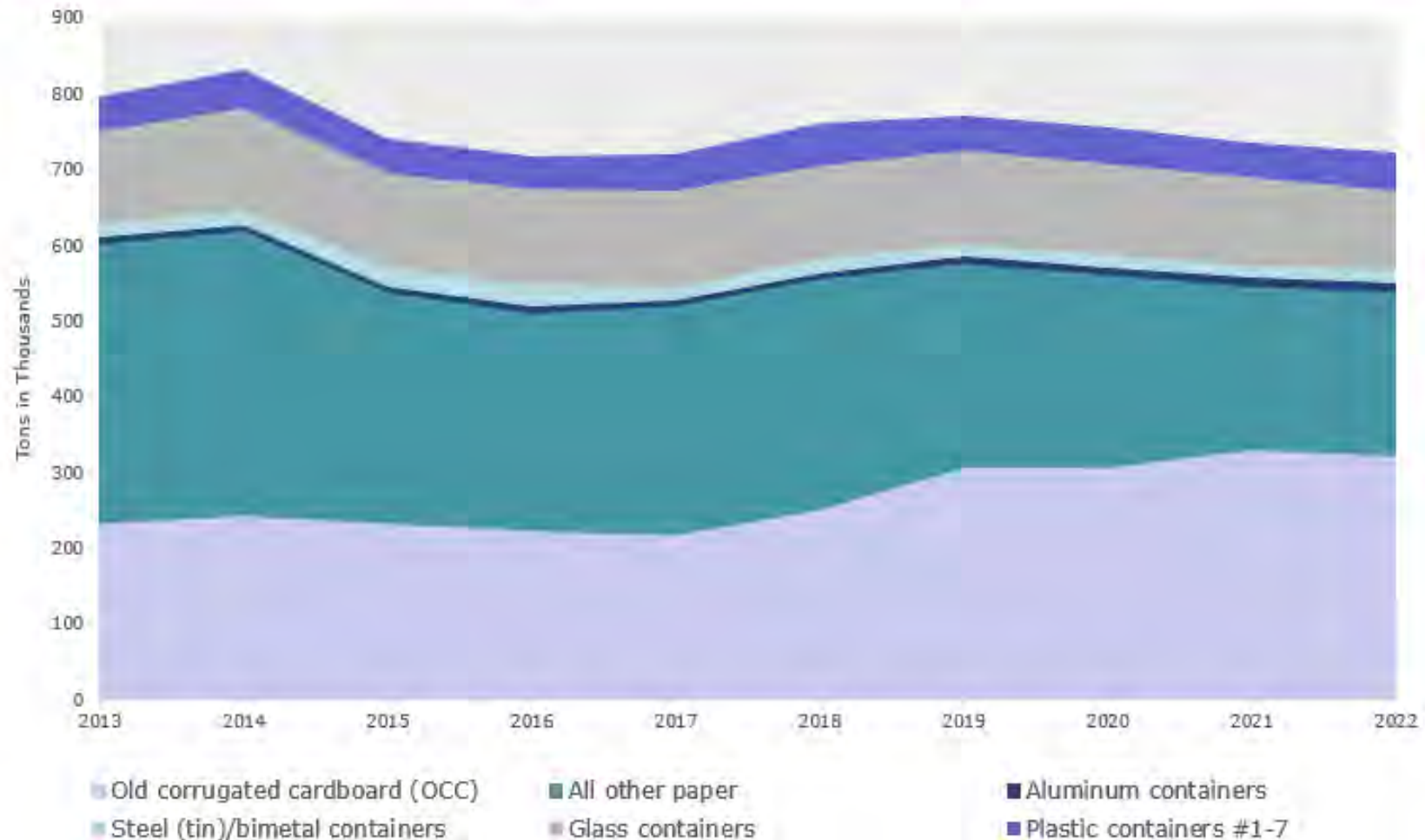
Recyclable Materials Collected by Wisconsin Self-Certified MRFs (in tons)

Mandatory Reporting - Banned	2022	% Change from 2021	
Old corrugated cardboard (OCC)	322,492		-2.0%
All other paper	215,811		-0.7%
Aluminum containers	12,353		7.0%
Steel (tin)/bimetal containers	17,931		5.8%
Glass containers	105,282		-9.3%
Plastic containers #1-7	47,647		10.2%
Total Mandatory Reporting	721,516		-1.7%

Note: Wisconsin law bans these materials from landfills, however, these totals may contain incidental amounts of non-banned materials such as residential mixed paper, plastic #3-7 containers, and foam polystyrene.

Self-Certified MRF Data Trends: Mandatory Reporting- Banned Materials

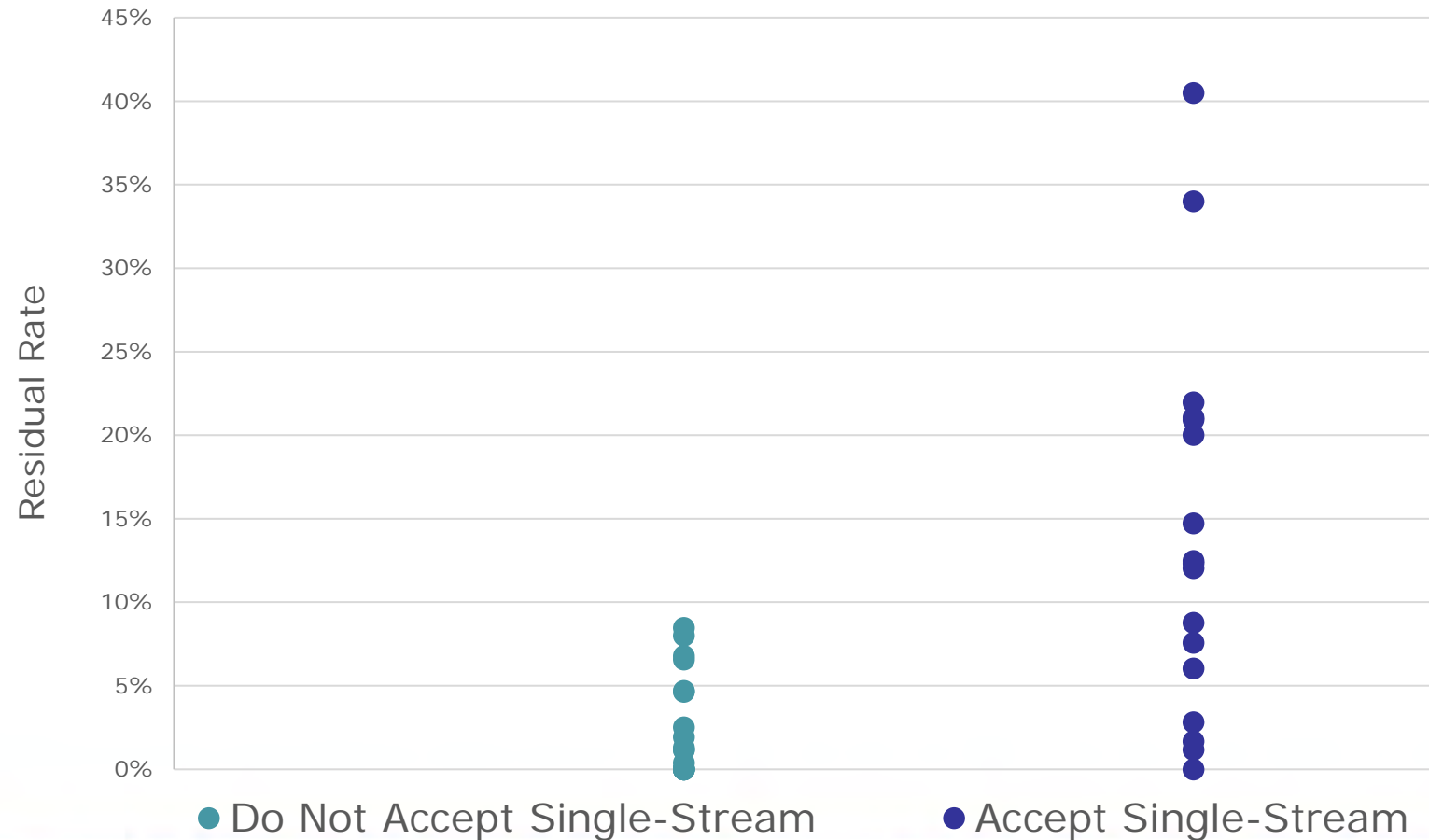
Trends In Recycling: All Banned Materials Sent to End Markets from Self-Certified MRFs



Note: Wisconsin law bans these materials from landfills, however, these totals may contain incidental amounts of non-banned materials such as residential mixed paper, plastic #3-7 containers, and foam polystyrene.

Self-Certified MRF Data Trends: Residual Rate Comparison

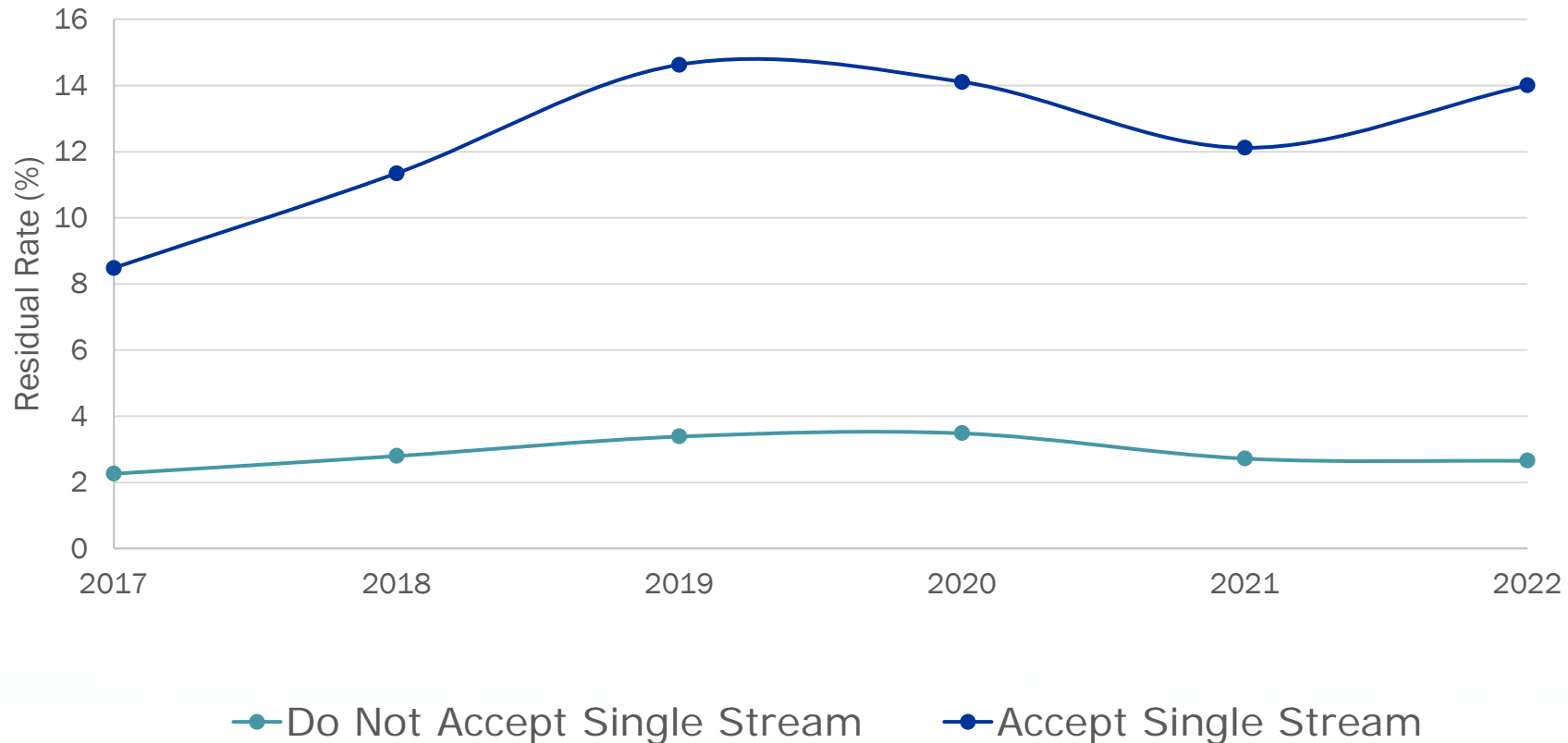
Residual Rates Based on % Received for All Self-Certified MRFs Located in WI in 2022



Note: Wisconsin law bans these materials from landfills, however, these totals may contain incidental amounts of non-banned materials such as residential mixed paper, plastic #3-7 containers, and foam polystyrene.

Self-Certified MRF Data Trends: Mandatory Reporting- Banned Materials

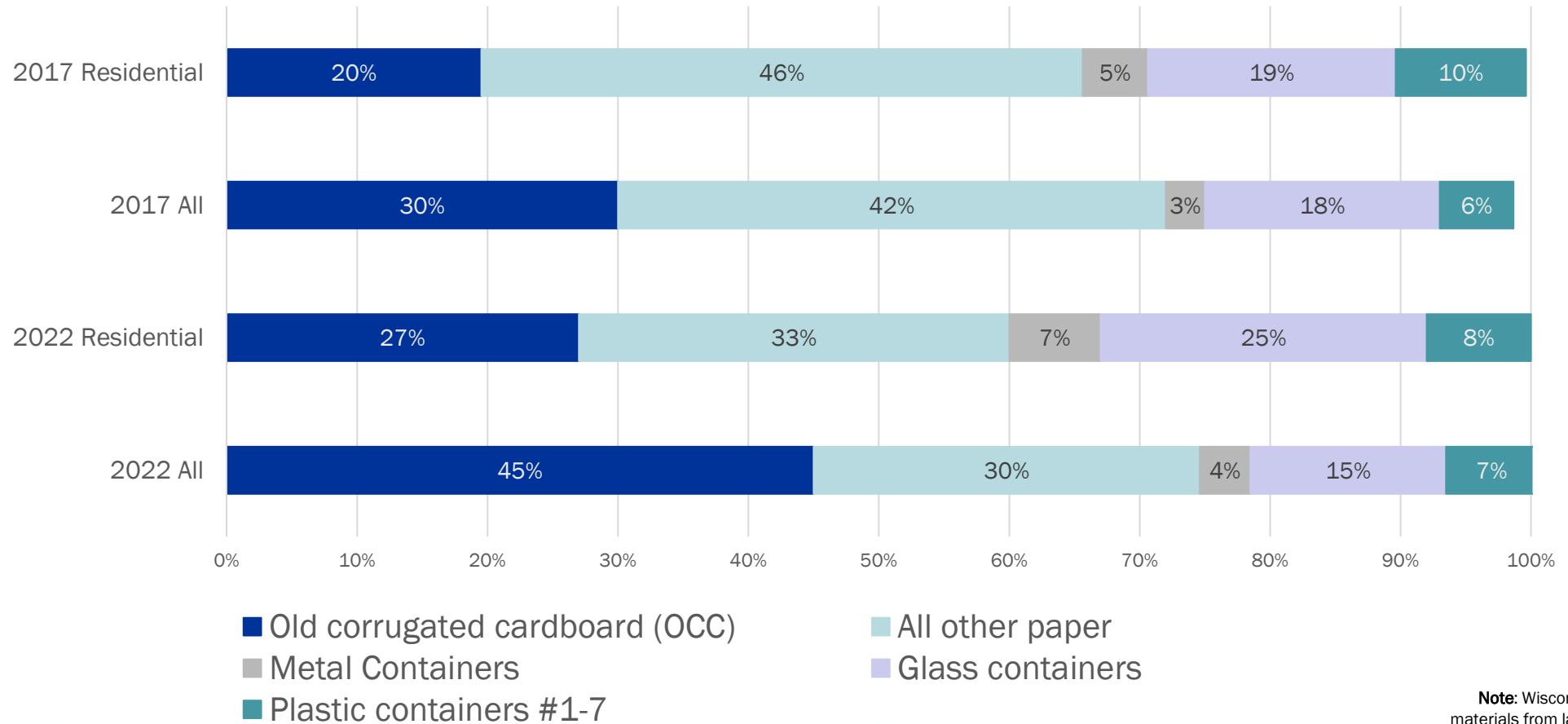
Residual Rate Trends Based on % Received for All Self-Certified MRFs Located in WI through 2022



Note: Wisconsin law bans these materials from landfills, however, these totals may contain incidental amounts of non-banned materials such as residential mixed paper, plastic #3-7 containers, and foam polystyrene.

Self-Certified MRF Data Trends: Materials Breakdown

Breakdown of Materials Sent to End Markets by WI Self-Certified MRFs- 2017 vs 2022



Note: Residential numbers are determined from MRFs that report $\geq 90\%$ inbound materials as residential.

Note: Wisconsin law bans these materials from landfills, however, these totals may contain incidental amounts of non-banned materials such as residential mixed paper, plastic #3-7 containers, and foam polystyrene.

Questions?

Jennifer Semrau

Waste Reduction & Diversion Coordinator

Jennifer.Semrau@wisconsin.gov

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Environmental Enforcement Program 101

– Sadie Derouin

Environmental Enforcement Specialist and WA Program Liaison

Outline

- Environmental enforcement overview
- Environmental enforcement section make-up
- Stepped enforcement process
- Questions

Environmental Enforcement Overview

- Compliance monitoring, education & enforcement are essential components of successful environmental protection programs
- Clear, timely communication often achieves voluntary compliance
- Staff investigate & address violations, in alignment with priorities, using stepped enforcement

Environmental Enforcement Section

- Two components to the section
 - Environmental Enforcement Team
 - Investigative Warden Team
- What do we do?
 - Civil & criminal enforcement support to environmental protection programs
 - Cover all environmental regulatory programs
 - Use stepped enforcement process

Division of Public Safety and Resource Protection

Investigations and Environmental Enforcement Section

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Env. Enforcement Specialist
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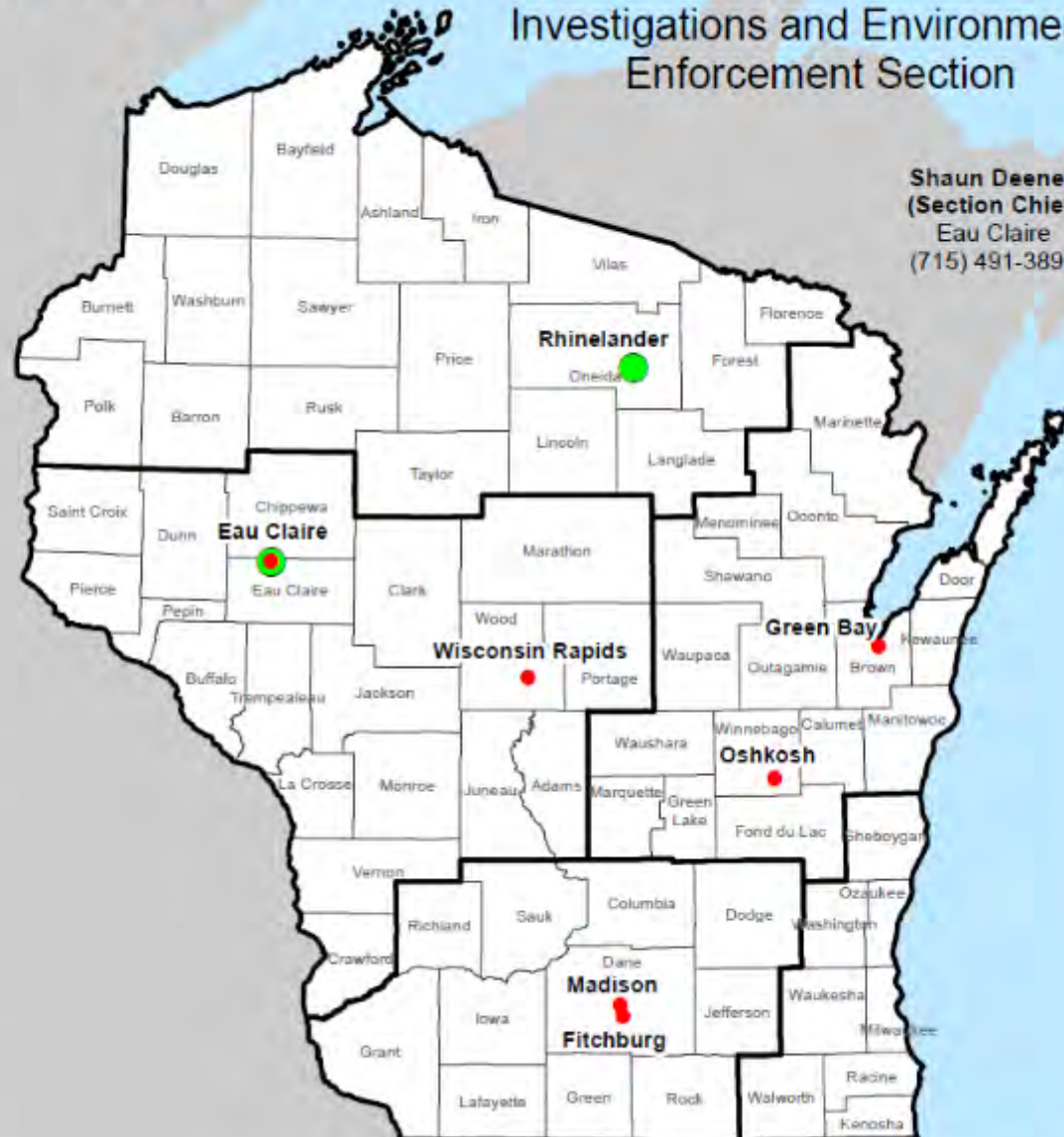
Eau Claire
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• Emily Pedersen
Env. Enforcement Specialist
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• Jessica Schoen
Env. Enforcement Specialist
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Fitchburg
• Sadie Derouin
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Wisconsin Rapids
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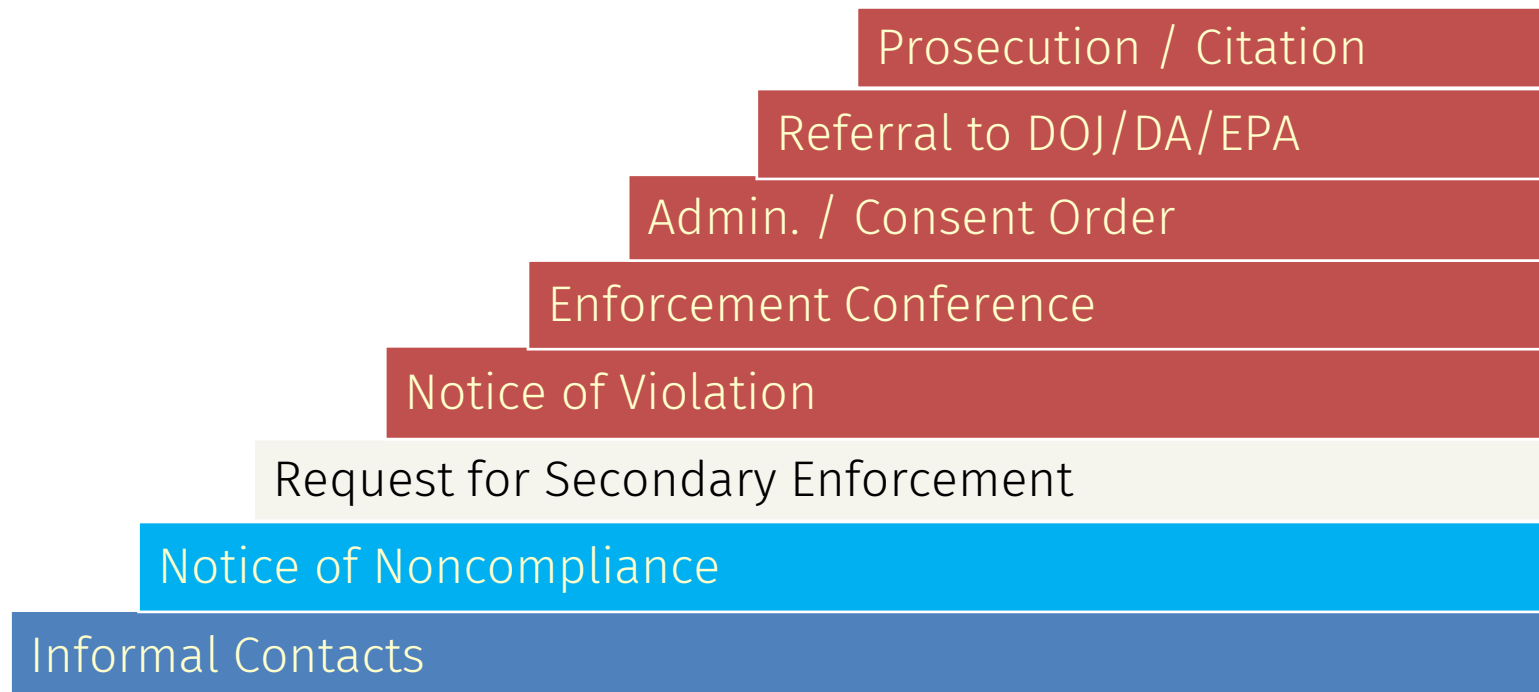
Green Bay
• Alek Henseler
Env. Enforcement Specialist
TBD

Shaun Deeney
(Section Chief)
Eau Claire
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Map last updated March 28, 2023 by BTS - GIS Section

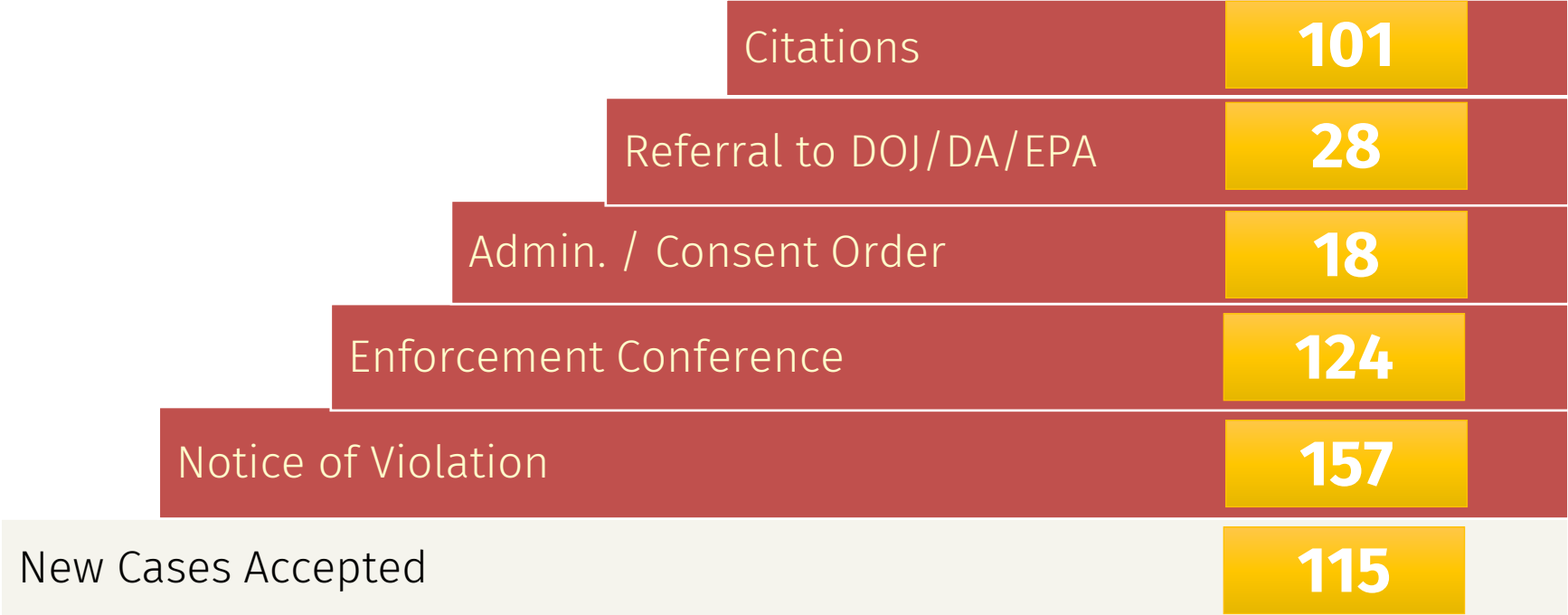
What is stepped enforcement?



Why stepped enforcement?

- Data shows most violations are resolved voluntarily
- It makes the best use of limited field, enforcement and legal resources
- Allows us to address environmental violations at the lowest level appropriate for the circumstances

Stepped Enforcement 2022 Data



Questions?

Sadie Derouin

Environmental Enforcement Specialist

Investigations & Environmental Enforcement Section

Division of Public Safety and Resource Protection

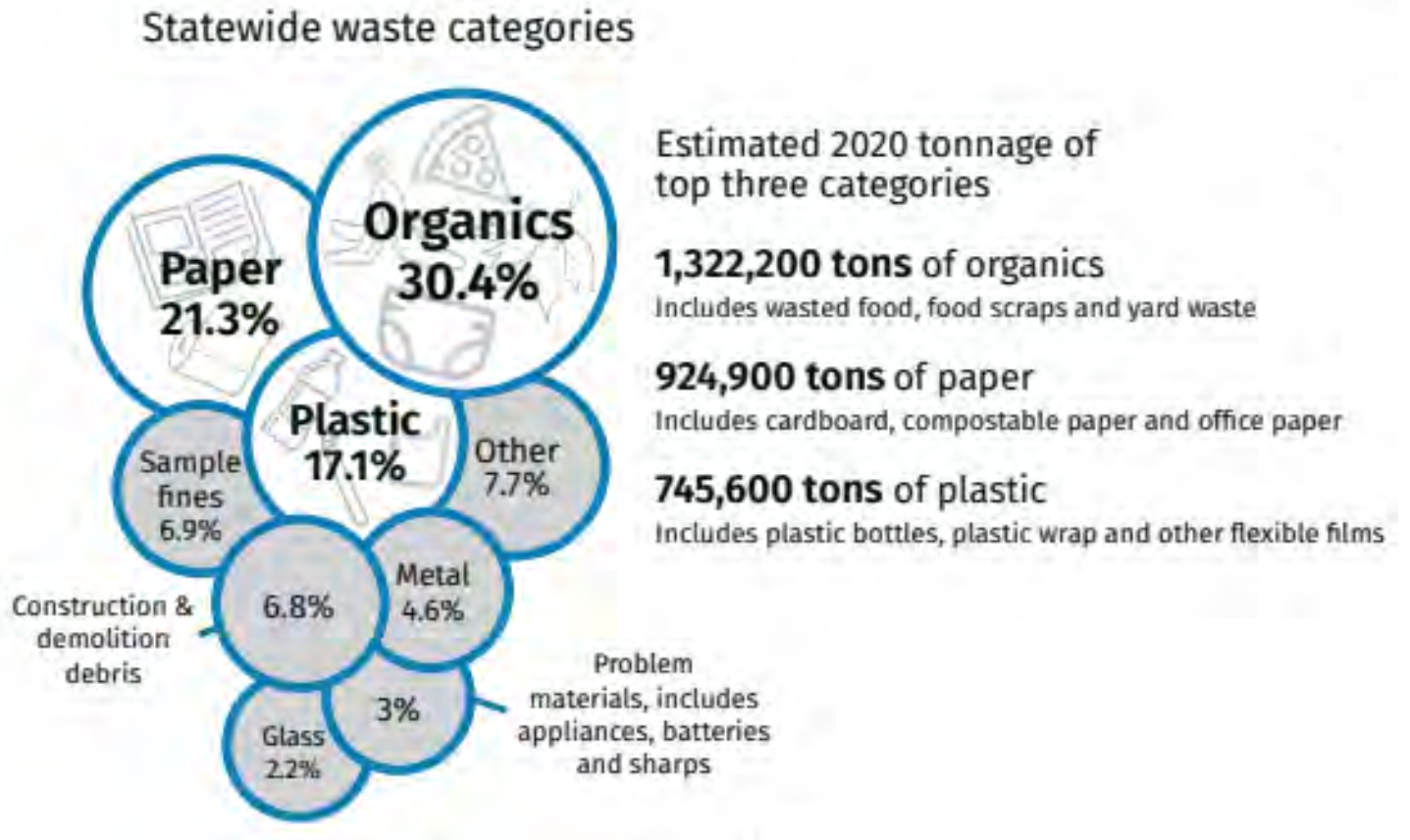
sadie.derouin@wisconsin.gov

EPA SWIFR Funding Plan and Timeline – Kate Strom Hiorns

Recycling and Solid Waste Section Chief

Solid Waste Infrastructure for Recycling

- SWIFR: Federal grant
- WI award focused on food waste prevention and reduction
- [Recycling Grant Selectees and Recipients | US EPA](https://www.epa.gov/recycling-grant-selectees-and-recipients)
- <https://dnr.wisconsin.gov/topic/waste/residentialfoodwaste.html>



Investing in America through the
Bipartisan Infrastructure Law
Solid Waste Infrastructure for Recycling
State and Territory Grant Fact Sheet
Wisconsin



Grant Recipient Information

Name: Wisconsin Department of Natural Resources

EPA Information

Region: EPA Region 5

Highlights

- Conduct research and develop a statewide food waste management plan related to the National Food Loss and Waste Reduction Goal.
- Provide statewide technical assistance and services to local governments, business institutions, and farms on projects that prevent or divert food waste.

Overview of Wisconsin's Planned Activities

Wisconsin seeks to reduce per-capita food waste disposed of in Wisconsin landfills by half by 2030, which includes increasing awareness of food waste impacts, increasing infrastructure options and capacity for food waste management, and reducing greenhouse gas emissions. Wisconsin also will conduct food waste prevention research, including reduction and management research and best practices; develop and evaluate food waste management options; and design data measurement methods to track progress toward state food waste reduction and diversion goals. In addition, Wisconsin will offer statewide technical assistance and services to local governments, institutions, businesses, and farms engaging in food waste reduction activities.

Current Battery Recycling Landscape – Sarah Murray

E-Cycle Wisconsin Coordinator

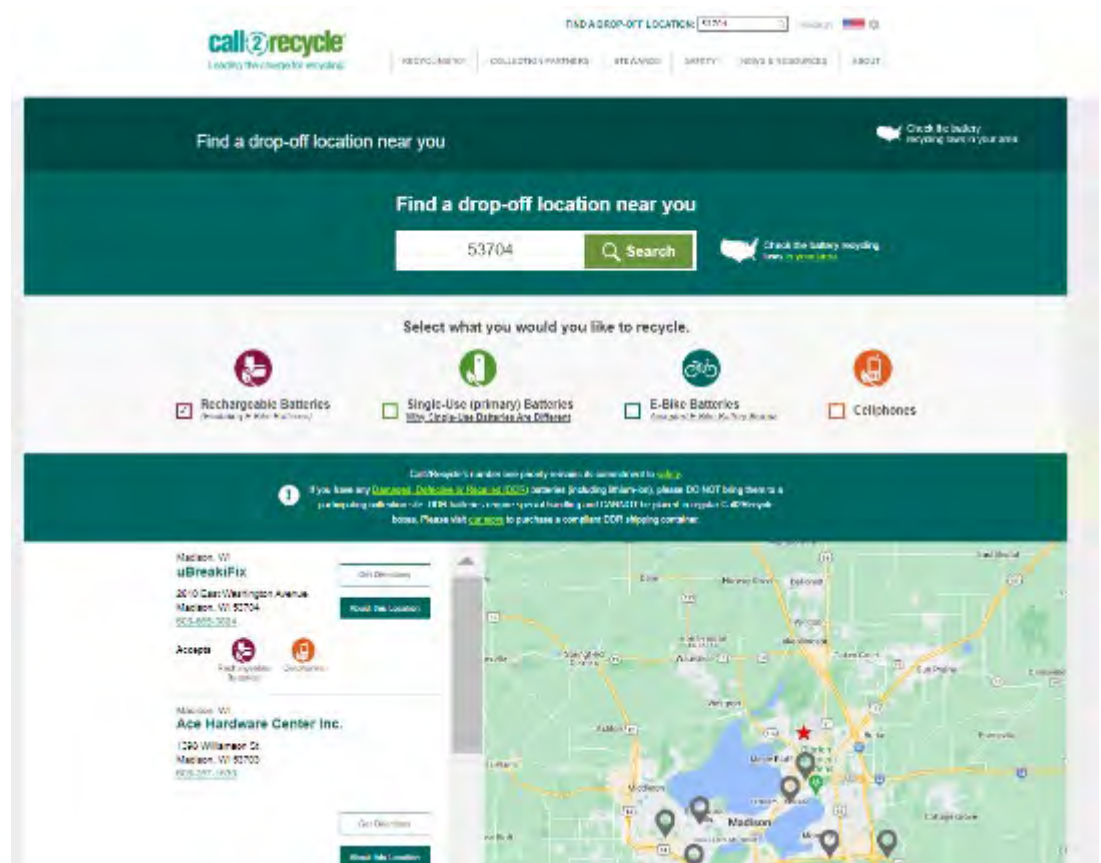
Understanding battery types

- Lead acid batteries: banned from landfill disposal
- Lithium-ion batteries in **specified** electronics- banned from disposal
- Lithium-ion batteries in **non-specified** electronics- **NOT** banned from disposal, device may not be hazardous waste
- Single-use alkaline batteries (AAA, AA, C, D)- limited recycling options, typically landfilled
- Other ‘non-hazardous’ batteries (rechargeable alkaline, carbon zinc, zinc air)- limited recycling options, typically landfilled
- Hazardous waste batteries (lithium-ion, lithium, nickel cadmium, nickel metal hydride, etc.)
 - Households: recycling encouraged, may legally landfill
 - Non-households: recycling or management as universal/hazardous waste required

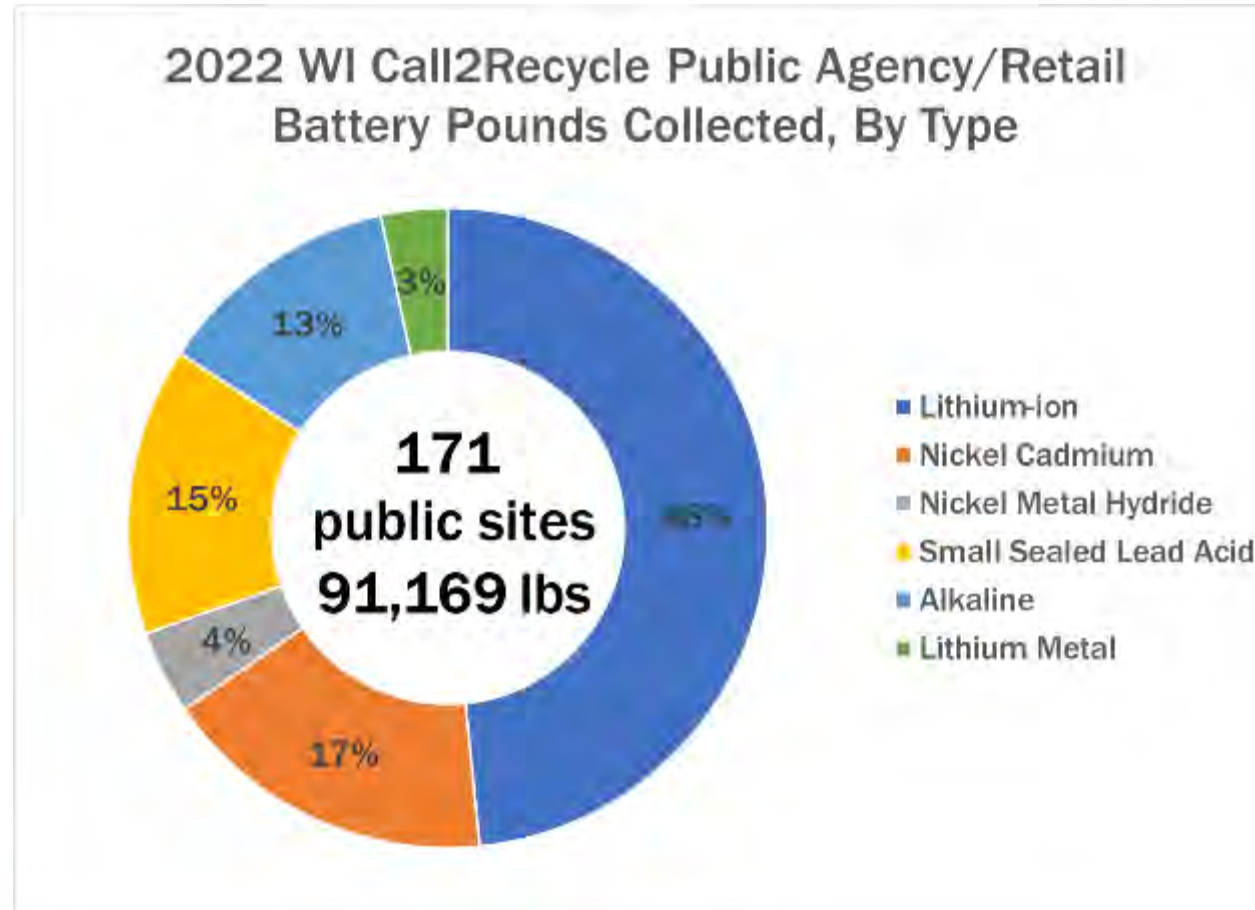


Recycling options for loose batteries

- Retailers
- Municipal and Clean Sweep programs
- Call2Recycle is largest take-back program
- Federal investment in recycling infrastructure
- Importance of safe packaging and storage



Current WI Call2Recycle participation



Participating in Call2Recycle

- Collection boxes or drums with US DOT permits and designed to prevent fires
- Municipal recycling programs that accept from the public can get basic boxes for free
- Charges for non-rechargeable batteries, non-public sites, kits for damaged, defective & recalled (DDR) batteries
- [Call2Recycle's Becoming a Collection Partner page](#)



- High-Energy Battery Recycling Solution

- Ideal for batteries used in e-Transport (e-bike and e-scooter) applications, outdoor power equipment, power tools and power cleaning products
- Recycling kit permitted to 26.4 lbs. of batteries
- Access to US DOT Special Permit 20851 eliminating the need to ship these batteries fully regulated
- Prepaid shipping, recycling and reporting services



DNR outreach efforts

Household Battery Recycling

Batteries power many items we use in our daily lives, and can pile up when they are no longer useful. This guide provides an overview of requirements and explains how to safely store and dispose of common types of household batteries.

Battery recycling requirements for households

Wisconsin has no legal requirements, with the exception of lead-acid batteries, for disposal of household-generated batteries. These include alkaline, lithium, lithium ion, metal hydride, nickel-cadmium, silver oxide and zinc-air. Batteries come in many sizes and can be rechargeable or single use. The Department of Natural Resources recommends recycling many battery types by taking them to a drop-off site. Batteries should never go in household recycling bins. For more information, review the chart on the back of this publication, or go to dnr.wi.gov and search "batteries."



Household battery recycling locations

Lead-acid batteries, or "automotive type batteries," are banned from disposal. Consumers may bring lead-acid batteries to any Wisconsin retailer that sells these batteries for recycling. This service is free to customers who buy a new battery. Customers may be charged a fee if they bring in a used battery without buying a new one.

For drop-off locations that accept **other battery types**, visit WisconsinRecyclingDirectory.com or Call2Recycle.org or contact your local recycling program. Some sites may charge a fee or accept only certain battery types.



Know the risk: how to prepare and store batteries for recycling

Many batteries, especially lithium ion, pose a fire risk due to their chemistry and ability to hold a charge. Batteries can spark and start a fire if their terminals touch metal or each other. The following recommendations can lower the risk of fire.

- Put each battery in an individual, clear plastic bag, or tape each battery's terminals with clear packing tape.
- Store batteries in a non-metal container.
- Store swollen or damaged batteries in sand or kitty litter.
- Keep battery labels visible.
- Take stored batteries to a drop-off location frequently.



Electronics with rechargeable batteries banned from Wisconsin landfills and incinerators
Cellphones
Laptops
Tablets
Computer peripherals
Other portable electronics with screens
Visit dnr.wi.gov, search "recycle" for a full list of banned electronics and to find collection sites or truck rack programs.



Single-use alkaline batteries have little recycling value and may be safely thrown in the trash.



Wisconsin Department of Natural Resources

December 9, 2022

When you're cleaning up after the holidays, make sure rechargeable batteries and electronics don't end up in the trash or recycling bin.

Many batteries—particularly lithium and lithium-ion batteries that power small electronics—can spark and cause fires in trucks, at recycling facilities or at landfills when damaged by equipment.

In July 2022, a fire started at the city of Janesville landfill, most likely due to lithium batteries in the trash. Thanks to a great response from local fire departments and the landfill equipment operators, this fire was put out quickly. It could have been much worse.

You can help prevent future fires by taking your electronics and batteries to drop-off recycling sites.

For information on how to properly recycle electronics and batteries, visit <https://dnr.wi.gov/topic/recycle>.



DNR.WISCONSIN.GOV

E-cycle | Wisconsin DNR

TVs, laptops, cellphones and other electronics contain valuable materials that can be...

Learn more

1.1K

501 comments 593 shares



WISCONSIN
DEPARTMENT OF
NATURAL RESOURCES

NEWS RELEASE

FOR IMMEDIATE RELEASE: June 9, 2023

Contact: Sarah Murray, DNR E-Cycle Wisconsin Coordinator
Sarah.Murray@wisconsin.gov or 608-234-0533

Prevent Recycling Fires By Safely Disposing Of Used Batteries



A punctured or bent lithium-ion battery can produce enough heat to melt or ignite materials near the battery, even if the battery itself does not ignite. Photo Credit: Outagamie County Recycling and Solid Waste

MADISON, Wis. – The Wisconsin Department of Natural Resources (DNR) reminds the public of the dangers of throwing rechargeable batteries, electronics and other materials that could cause a fire in trash or recycling bins.

In the last month, there have been large, damaging fires at multiple Wisconsin recycling facilities. While it is hard to pinpoint the exact cause of each fire, many batteries, especially powerful lithium-ion batteries found in many electronics, can

Devices eligible for E-Cycle Wisconsin

- Cellphones, other telephones with a video display and phone accessories operated by a battery
- Computers (desktop, laptop and netbook computers)
- Desktop printers (including those that scan, fax and/or copy and 3-D printers) and fax machines
- Computer monitors
- other computer accessories (including keyboards, mice, speakers, external hard drives and flash drives)
- DVD players, VCRs and other video players (i.e., DVRs)
- Tablets and e-readers
- TVs
- Video game consoles and battery-powered Video game system components / portable hand-held gaming devices



New E-Cycle Wisconsin eligible devices

- Three new categories of devices now eligible electronics because of batteries
 - Telephones with video display (banned from disposal)
 - Phone accessories with batteries (not banned from disposal)
 - Video game accessories/devices with batteries (not banned from disposal)



Key devices NOT included



Options to address battery fire problems

Legislative

- Extended producer responsibility for batteries
- Expand scope of E-Cycle Wisconsin covered devices
- Add more E-Cycle WI-eligible devices
- Expand electronics or battery disposal bans
- Create grant program/other funding source for collection
- Provide funding for fire suppression equipment


Non-legislative


- Outreach
- Technical assistance for waste industry
- Survey to document fires and collection infrastructure
- DNR rulemaking to add eligible or banned electronics (~3 years)


Extended producer responsibility

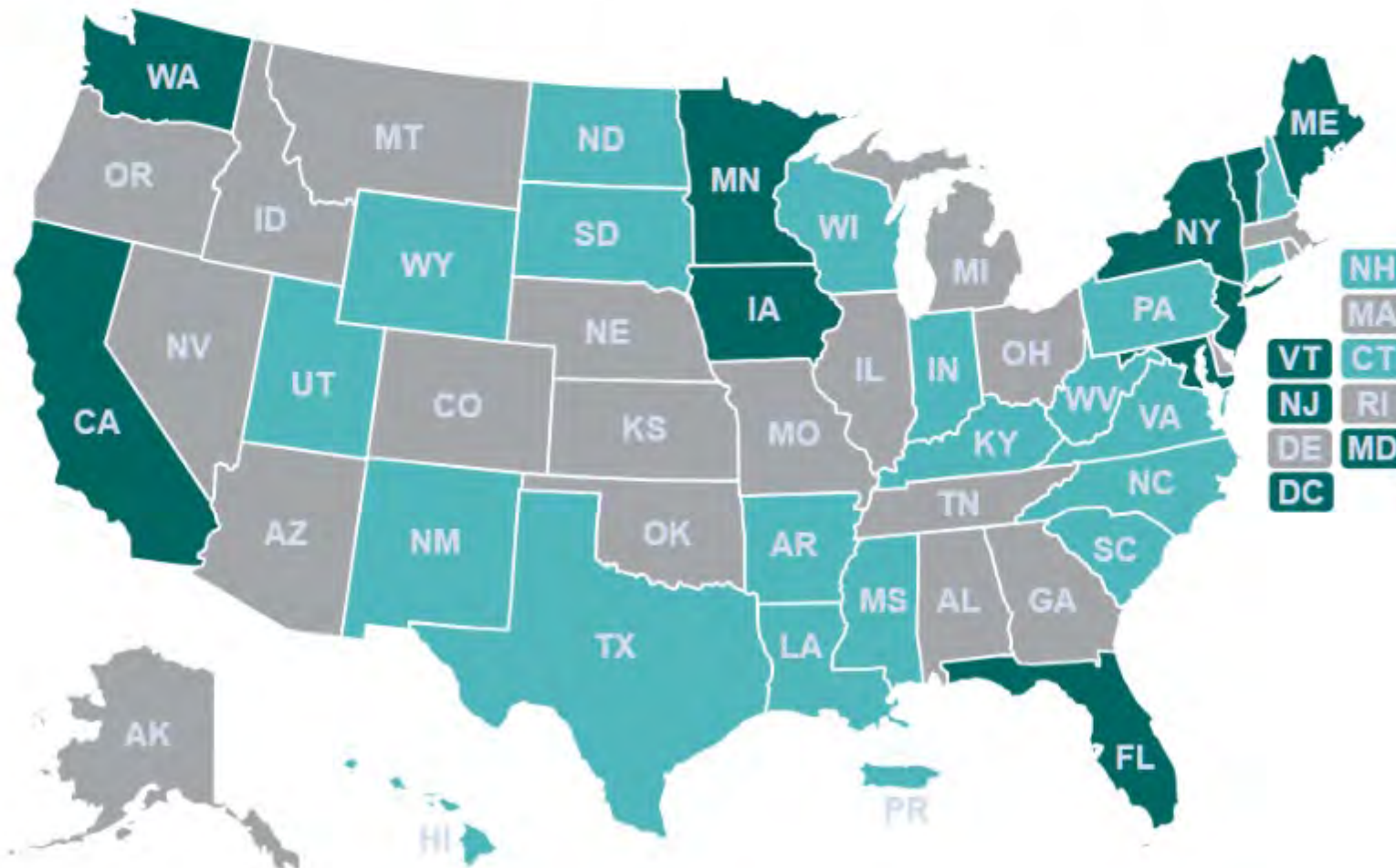
- Requires producers to fund battery and/or battery-containing device collection
- Best practices: performance goals, convenience standards and inclusion of a broad range of both single-use and rechargeable batteries
- Recent state battery laws
 - CA: separate laws for loose batteries and battery-containing devices (2022)
 - DC: covers both batteries and battery-containing products (2021)
 - VT: first single-use EPR law (2014)
 - WA: first to include e-mobility (2023)

Recycling Laws By State

 State battery recycling requirements in effect

 Producers required to offer or fund battery recycling

 No battery recycling requirements



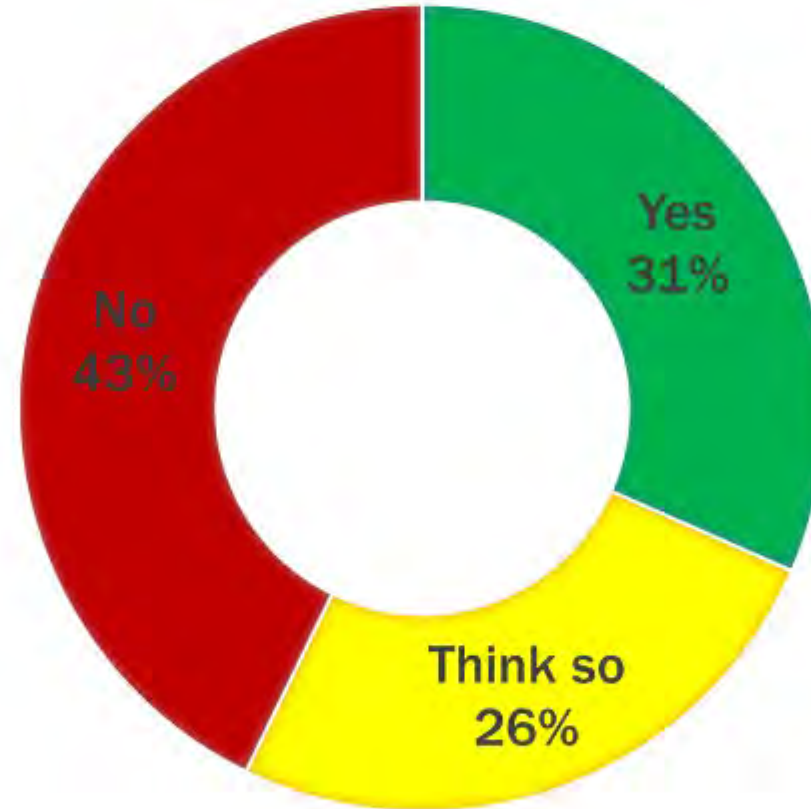
Other state approaches

- Advance recovery fee for battery-containing devices (CA, SB 2015)
 - Many battery-containing devices added to state's e-waste program in 2026
 - Products that contain a battery that is not designed to be easily removed by the user with common household tools
 - Does not include battery storage, medical equipment, vaping devices
 - Consumers pay point-of sale fee, deposited into recycling fund managed by the state
- Disposal ban (currently under consideration in IL)

Expanding outreach

- Additional funding needed for staff, ads, publications
- DNR prohibited by statute from using recycling funds for education
- **Need places for consumers to take batteries/devices**

Do you know where to recycle or properly dispose of household batteries?
2021 DNR household survey



Recycle Your E-Waste



We Accept:



For other items not pictured, please contact us for more information.



Using clear messaging

- **Clear:** Recycle your electronics and batteries at drop-off sites. Don't put electronics or batteries in curbside recycling bins or carts.
- **Unclear:** Recycle your electronics and batteries.

The following items CANNOT be put in the trash or sent to landfills or incinerators:



- Computers (desktops, laptops and tablets)
- Monitors (includes similar devices with screens of at least 7")
- Computer accessories (mice, keyboards, external hard drives, etc.)
- TVs
- Cellphones
- Video game consoles
- DVD players, VCRs, DVRs
- Desktop printers (including those that scan, fax and/or copy and 3-D printers)
- Fax machines

These and other electronics can be RECYCLED at drop-off sites around the state or through mail-back programs. Do not put in your recycling bin or cart.



CONNECT WITH US

Sarah Murray

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/WIDNR



@WIDNR



@WI_DNR



/WIDNRTV



"WILD WISCONSIN:
OFF THE RECORD"

**Questions
on any meeting items?**

Wrap Up

- Slides will be posted at:
DNR.WI.gov search “SWIP”
(<https://dnr.wisconsin.gov/topic/Waste/SWIP.html>)



Contact:
Casey.Krausensky@wisconsin.gov

for future topic ideas/questions

Next SWIP meeting will be fall 2024

- Sign up for “Solid Waste News” gov delivery for notifications
DNR.wi.gov search “solid waste”
(<https://dnr.wisconsin.gov/topic/Waste/Solid.html>)

