



R·R·R·A·S·O·C

2023 Annual Report

Member Communities

**Farmington
Farmington Hills
Milford
Milford Township
Novi
South Lyon
Southfield
Walled Lake
Wixom**

Board of Directors

Chairman

Fred Zorn, City Administrator, Southfield

Vice Chairman

Don Green, Township Supervisor, Milford Township

Treasurer

Chelsea Pesta, Assistant City Manager, Walled Lake

Secretary

Gary Mekjian, Assistant City Manager, Farmington Hills

David Murphy, City Manager, Farmington
Christian Wuerth, Village Manager, Milford
Victor Cardenas, City Manager, Novi
Paul Zelenak, City Manager, South Lyon
L. Dennis Whitt, City Manager, Walled Lake
Steve Brown, City Manager, Wixom

Designated Board Alternates

Chuck Eudy, Director, Farmington Department of Public Services
Karen Mondora, Assistant City Manager, Farmington Hills
Derrick Schueller, Superintendent, Farmington Hills Department of Public Works
Mike Karll, Director, Village of Milford Department of Public Services
Jeff Herczeg, Director, Novi Department of Public Works
John Michrina, Deputy City Administrator, Southfield
Patrick Ryan, Director, Southfield Department of Public Works
Tim Sikma, Director, Wixom Department of Public Works

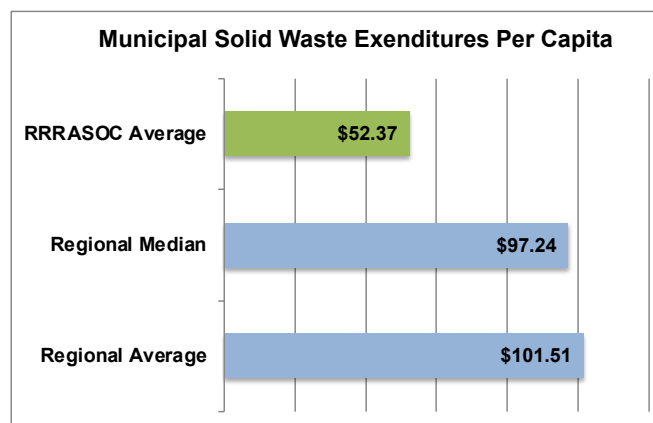
RRRASOC Staff

Michael Csapo, General Manager
Laura Shaw, Administrative Secretary
IRIS Waste Diversion Specialists, Education and Outreach Coordinators

Over the course of 2023, RRRASOC and its Member Communities continued providing cost-effective, environmentally responsible materials management programs through intergovernmental cooperation and public-private partnerships. RRRASOC worked with industry stakeholders and our communities to improve upon programs and facilities, capitalizing on opportunities to deploy state-of-the-art technology and best practices.

Notable activities and accomplishments last year included:

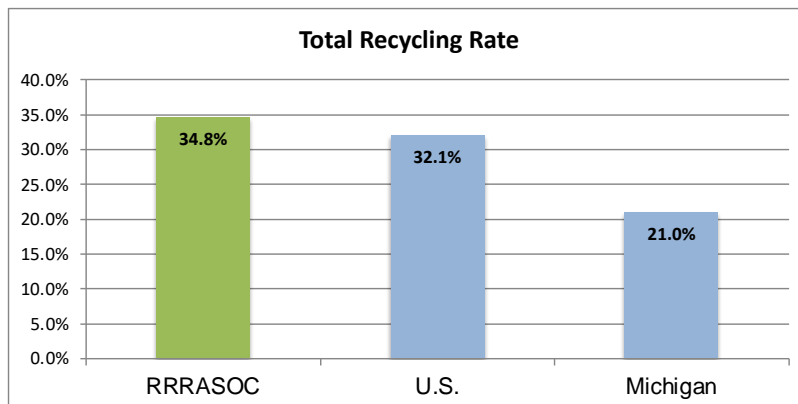
- RRRASOC initiated the installation of a two robotic sorters and AI scanners at the MRF, with funding from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), The Recycling Partnership, the Carton Council, and the Foodservice Packaging Institute;
- RRRASOC initiated an EGLE grant-funded project with IRIS Waste Diversion Specialists and The Recycling Partnership to increase multi-family recycling, as well as to improve material quality and processing safety by reducing recycling contamination;
- The Michigan Department of Agriculture and Rural Development increased RRRASOC's Clean Sweep grant, helping RRRASOC facilitate the collection of pesticides throughout the region;
- RRRASOC helped three communities evaluate proposals for curbside collection services;
- RRRASOC, in partnership with SOCRRA, contracted with Tetra Tech to begin the development of a Storm and Disaster Debris Management Plan that will cover their 21 communities, both collectively and individually;
- RRRASOC, in partnership with its communities and others regional stakeholders, began developing opportunities for improved organics management and composting;
- The annual audit by Plante Moran of the *RRRASOC Financial Report for FY 2022 – 2023* showed that RRRASOC conducted its financial affairs in accordance with generally accepted accounting principles and that the Authority improved its financial position;
- The completion of the *FY 2023 – 2024 Solid Waste Expenditure Benchmark Study* demonstrated the continued cost-effectiveness of the programs in the RRRASOC communities.



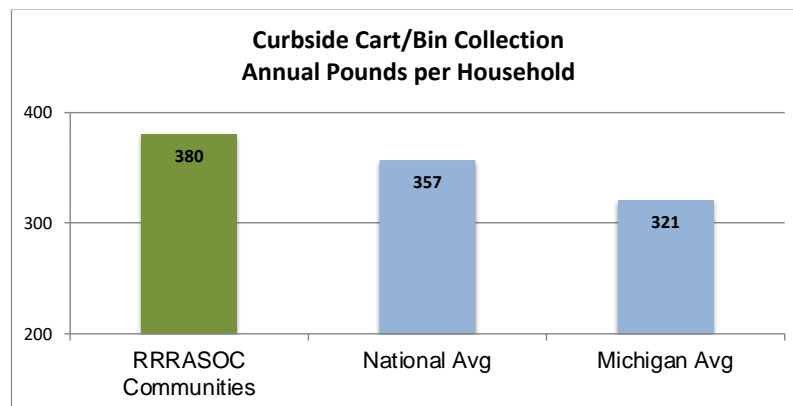
In 2023, through the RRRASOC community programs, 15,099 tons of paper, plastic, glass, and metal were recycled; 19,854 tons of yard waste were composted; 11 tons of clothing were collected for reuse; 236 tons of hazardous material were collected for recycling or disposal; and 66,090 tons were landfilled.

In total, more than 35,200 tons of recyclable and reusable material, yard waste, and household hazardous waste items were collected and diverted from local landfills through the communities' curbside collection, drop-off, and event-based programs.

The combined recycling rate of the RRRASOC communities increased from the prior year to 34.8%, which is higher than both the U.S. and Michigan rates.



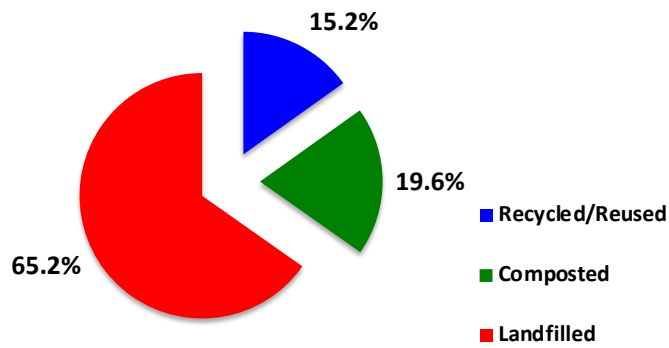
In aggregate, the RRRASOC communities collected 380 pounds per household with their curbside cart/bin collection programs, exceeding the national and Michigan averages.



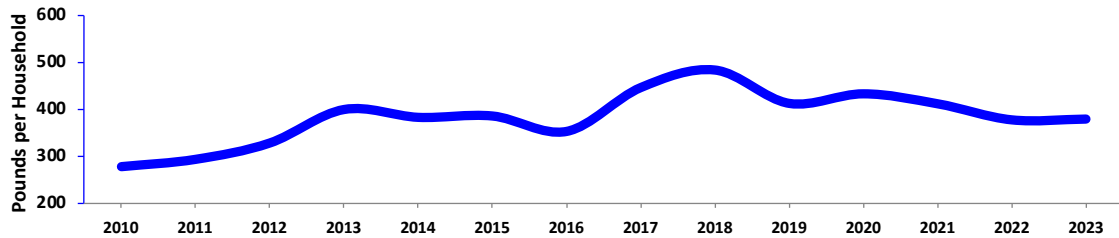
Lifecycle analysis shows that recapturing those resources for value-added economic activity also yielded significant environmental benefits, including the following:

- Conserved more than 152.2 billion Btu, which is the equivalent of the annual energy consumption of 1,507 households;
- Reduced CO₂e emissions by 33,832 metric tons;
- Preserved more than 113,990 trees;
- Reduced airborne pollution emissions by 17,074 tons;
- Reduced waterborne pollution emissions by 64 tons.

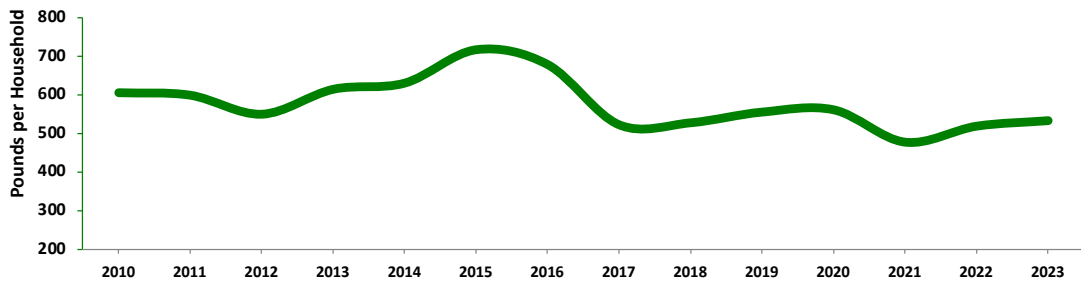
Solid Waste Disposition: 2023



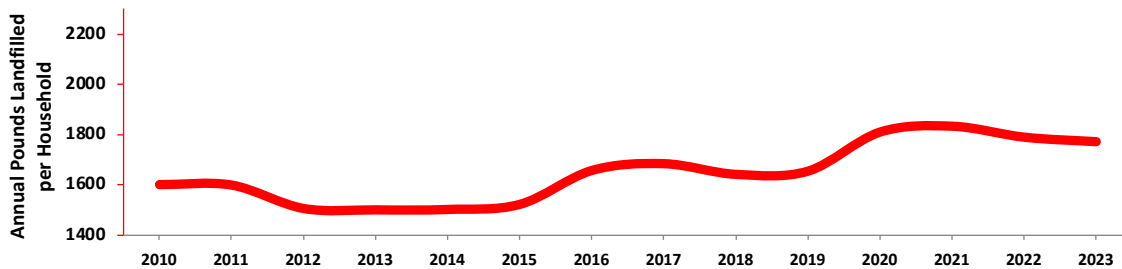
Recycling History Curbside Collection



Composting History



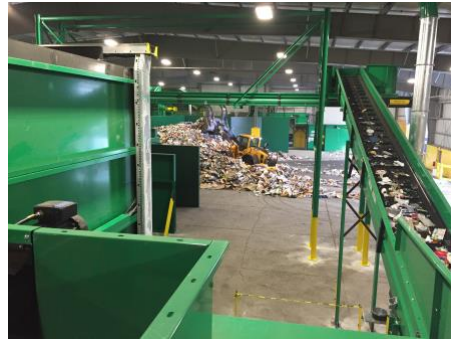
Waste Generation History



RRRASOC extended its operating agreement with its contracted MRF operating partner, Republic Services. The MRF operated efficiently through the year and continued to serve as an important part of community and commercial recycling programs throughout southeast Michigan.

Overall, the facility processed more than 48,810 tons of material during the year. The 74,600 RRRASOC area homes and the two RRRASOC drop-off centers contributed nearly 30% of the total throughput. The paper, glass, plastic, and metal that was processed at the MRF was shipped throughout the U.S. and abroad, providing critical feedstock for manufacturers and the sustainable supply chain.

Capital expenditure projects included the initial stages of installing two grant-funded robotic sorters at the MRF, which will address chronic labor shortages, improve operational efficiency, and improve product quality.



RRRASOC's Household Hazardous Waste (HHW) collection program had another solid performance in 2023. More than 8,800 residents participated in the program, which made it the third highest annual participation in program history and 6% higher than the average for the prior five years.

The use of the contractor's site for drop off activity set a new record, exceeding the old record set in 2021 by 9%.

Nearly 471,300 pounds of material were collected in 2023, which is 12% more than the historic program average.

RRRASOC worked with the Michigan Department of Agriculture to increase RRRASOC's Clean Sweep grant to \$45,000, which facilitates the collection of pesticides throughout the region.

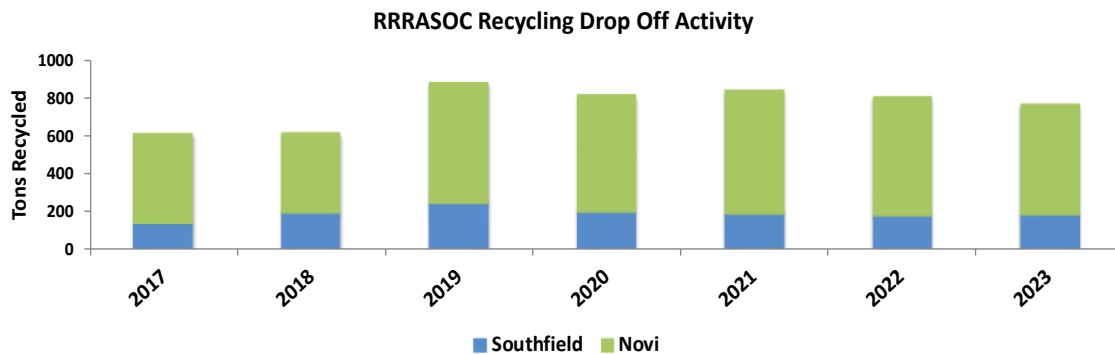
ERG Environmental Services, a local hazardous waste company, handled the material. Disposal and recycling costs through ERG continued to be among the lowest in southeast Michigan. All material was handled in accordance with state and federal laws.



RRRASOC's recycling drop-off centers continued to be a popular recycling option for residents and businesses throughout the region. Last year, nearly 771 tons were brought to the sites, which is .5% higher than the average for the previous six years.

The drop-off center in Novi accounted for more than 591 tons of recycling, while the Southfield location contributed another 179 tons.

RRRASOC worked with IRIS Waste Diversion Specialists and The Recycling Partnership to conduct analysis and education surrounding the use of the Southfield site to reduce contamination and improve material preparation compliance. The project also included outreach and promotional efforts targeted to improve recycling in multi-family homes.



RRRASOC maintained a collaborative, multi-media approach to community outreach and education, leveraging partnerships with stakeholder organizations. Efforts in 2023 complemented the communication programs of our individual communities with the following:

- 89,675 direct mail educational postcards;
- 21,719 first time users of the online Recycling Directory;
- 274,000 material searches by residents using our online Recycling Directory;
- More than 5,100 User Sessions with Recycling Directory mobile application;
- Subscribers to our monthly electronic newsletter increased by more than 9%;
- 569 new resident packets were distributed;
- Participation in community events throughout the area;
- Continuous improvements were made to RRRASOC's digital and print information by IRIS Waste Diversion Specialists, with ongoing design and funding assistance from stakeholder organizations such as The Recycling Partnership, the Carton Council, and the Foodservice Packaging Institute.

RRRASOC COMMUNITIES SOLID WASTE & RECYCLING 2023 METRICS

HOW WELL ARE WE RECYCLING?



Paper, Plastic, Glass,
& Metal Recycled



Clothing Reused



Hazardous Materials
Properly Managed



Yard Waste Composted

35,200
TOTAL TONS UTILIZED

66,090
TOTAL TONS LANDFILLED

101,290 TONS
TOTAL SOLID WASTE



TOTAL RECYCLING RATE IN
RRRASOC COMMUNITIES, 2023



TOTAL RECYCLING RATE
IN MICHIGAN

RRRASOC
COMMUNITIES
HAD A HIGHER
RESIDENTIAL
RECYCLING RATE
THAN THE
MICHIGAN
AVERAGE.

HOW MUCH DID IT COST?

(per capita)

\$101.51
SOUTHEAST MICHIGAN
(regional average)

RRRASOC COMMUNITIES ONLY SPENT ABOUT HALF AS MUCH AS THE REGIONAL AVERAGE!

\$52.37
RRRASOC COMMUNITIES

ENVIRONMENTAL IMPACTS

152
BILLION
BTU

Energy Saved

1,507
ANNUAL
HOUSEHOLD
EQUIVALENTS

33,832
METRIC TONS

Reduced CO₂e

**OVER
113,990**

Trees Saved

17,074
TONS

64
TONS

Reduced Air/Waterborne Emissions





R·R·R·A·S·O·C

20000 W. 8 Mile Road
Southfield, MI 48075
248.208.2270
248.208.2273 fax
www.RRRASOC.org

**Resource Recovery and Recycling Authority of Southwest Oakland County
2023 Annual Report**