Recycling Is Infrastructure Too presents:

Funding Recycling Infrastructure via Disposal Surcharges

February 15, 2022
Recycling Is Infrastructure Too Campaign

**ILSR**
Institute for Local Self-Reliance

**GREEN Education**

**NRC**
National Recycling Coalition

**Zero Waste USA**
Meet the Panelists

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Disposal Surcharges can Fund Recycling!

Presented by: Sophia Jones
ILSR Policy Fellow
Surcharges On Waste Disposal Fund Composting

More than 42 million tons of food scraps are landfilled or burned in the US each year, as estimated by the EPA. One reason among many is lack of adequate funding to prevent, rescue, and recycle wasted food. According to ReFED, an annual investment of $14 billion over the next ten years is needed to reduce current levels of wasted food. Such investment would result in $73 billion in annual

ilsr.org/disposal-surcharges-fund-composting/
Waste Surcharges to Fund Composting and More

One funding mechanism with a proven track record of raising funds to reduce and recycle waste is the establishment of a per-ton surcharge on waste landfilled or incinerated. A waste disposal surcharge is typically a fee added to the per-ton tipping fees charged for waste disposal at waste disposal sites such as landfills, incinerators, and transfer stations. They can be charged to waste haulers or even at the generator-level such that households and businesses are taxed directly based on waste generated.

Featured here are various examples of waste surcharges or fees that allocate generated revenue to fund recycling, composting, and waste diversion efforts. Some also support other environmental programs (such as Pennsylvania’s grant program). While most of these waste surcharges are implemented at the state level, there are a few notable local examples too.

Alameda County, California – Waste Disposal Surcharges
Alameda County’s robust system of waste management and diversion has allowed the county to achieve a 67% waste diversion rate, as of 2018. Through grants and projects administered by

Indiana – Waste Disposal Surcharge
Established in 1996, Indiana charges a state-wide solid waste disposal fee of $0.50 per ton on solid waste disposal at final disposal facilities in Indiana. The revenue is deposited equally into the Solid Waste Management Fund and the Indiana Recycling

ilsr.org/rule/waste-surcharges/
What is a Disposal Surcharge?

A fee added to the tipping fees charged at waste disposal sites

- Self-funding mechanism
- Advances diversion
- Disincentivizes disposal
# Surcharges that Fund Recycling

<table>
<thead>
<tr>
<th>State Policy</th>
<th>Surcharge Amount</th>
<th>Surcharge applies at:</th>
<th>Year Est.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Landfills</td>
<td>Incinerators</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$3/ton Recycling Tax</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$2/ton Recycling Fee</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>$0.25/ton Environmental Stewardship Fee</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$4/ton Disposal Fee</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>9.75% (households) 17% (commercial)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>$13/ton</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>$0.50/ton</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>North Carolina</td>
<td>$2/ton Disposal Tax</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>$4.25/ton</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>$4.75/ton for MSW disposal</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1.60/ton for C&amp;D disposal</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
## Surcharges that Fund Recycling (Local)

<table>
<thead>
<tr>
<th>Local Policy</th>
<th>Surcharge Amount</th>
<th>Surcharge applies at:</th>
<th>Year Est.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Landfills</td>
<td>Incinerators</td>
</tr>
<tr>
<td>Alameda County, CA</td>
<td>$4.34/ton AB 939 Implementation Fee</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>$8.23/ton “Measure D” Surcharge</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Santa Clara County, CA</td>
<td>$0.78/ton Solid Waste Planning Fee</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>$4.10/ton AB 939 Implementation Fee</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
# Revenue and Administration

<table>
<thead>
<tr>
<th>State/County</th>
<th>Annual Surcharge Revenue (data year)</th>
<th>Grant Program Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>$29 million (2018)</td>
<td>Dept. of Environmental Protection</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$105-112 million (2021)</td>
<td>Dept. of Environmental Protection</td>
</tr>
<tr>
<td>Minnesota</td>
<td>$90 million (2021)</td>
<td>Pollution Control Agency</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>$56 million (2019-2020)</td>
<td>Dept. of Natural Resources</td>
</tr>
<tr>
<td>Indiana</td>
<td>$4.86 million (2020)</td>
<td>Dept. of Environmental Management</td>
</tr>
<tr>
<td>North Carolina</td>
<td>$23 million (FY 2020-2021)</td>
<td>Dept. of Environmental Quality</td>
</tr>
<tr>
<td>Iowa</td>
<td>$8 million (2020)</td>
<td>Dept. of Natural Resources</td>
</tr>
<tr>
<td>Ohio</td>
<td>$69.8 million (MSW); $8.4 million (C&amp;DD) (2021)</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>Alameda County, CA</td>
<td>$9.7 million (2021)</td>
<td>StopWaste</td>
</tr>
<tr>
<td>Santa Clara County, CA</td>
<td>$1.3 million ($0.78 fee); $1.6 million ($4.34 fee) (2021)</td>
<td>Santa Clara County</td>
</tr>
</tbody>
</table>
## Grant Programs

<table>
<thead>
<tr>
<th>State</th>
<th>Grants to Local Governments?</th>
<th>Other Grants (To Whom?)</th>
<th>Other Environmental Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>Yes - counties and municipalities</td>
<td>Recycling Enhancement Higher Education Research Grants (higher education institutions)</td>
<td>No</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Yes - counties and municipalities</td>
<td>Growing Greener Plus Grants (various entities); Food Recovery Infrastructure Grant (nonprofits)</td>
<td>Preserving and conserving farmland, open space, water quality, and outdoor recreation</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Yes - counties</td>
<td>No</td>
<td>Landfill cleanups and environmental monitoring</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Yes - counties, municipalities, and recognized Indian tribes</td>
<td>No</td>
<td>Land cleanup and remediation, contaminated well cleanups, groundwater management</td>
</tr>
<tr>
<td>Indiana</td>
<td>Yes - counties and municipalities</td>
<td>Community Recycling Grant Program and Recycling Market Development Grants (various entities)</td>
<td>No</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Yes - counties and cities</td>
<td>No</td>
<td>Hazardous sites cleanup</td>
</tr>
<tr>
<td>Iowa</td>
<td>Planning Areas may retain a portion of the tonnage fee</td>
<td>Solid Waste Alternatives Program (various entities); Environmental Management Systems Program (planning areas)</td>
<td>Water quality improvement, greenhouse gas reduction, environmental education</td>
</tr>
<tr>
<td>Ohio</td>
<td>Local government units are eligible to apply for competitive grants</td>
<td>Recycling and Litter Prevention Grant Program (various entities)</td>
<td>Litter prevention and cleanup, assistance for soil and water conservation districts</td>
</tr>
</tbody>
</table>
## Grant Programs (Local)

<table>
<thead>
<tr>
<th>County</th>
<th>Grants to Local Governments?</th>
<th>Other Grants (To Whom?)</th>
<th>Other Environmental Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda County, CA</td>
<td>Yes - municipalities</td>
<td>Waste Prevention Grant Programs (nonprofits and businesses)</td>
<td>Carbon farm planning, sustainable landscaping, energy efficiency programs</td>
</tr>
<tr>
<td>Santa Clara County, CA</td>
<td>Yes - municipalities</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
New Jersey

In 2021:

- $16 million for municipal and county recycling programs
- $1 million for university recycling research grants
Minnesota

2019 SCORE report

The Minnesota Pollution Control Agency (MPCA) annually publishes a report on the Select Committee on Recycling and the Environment (SCORE) activities that summarizes information submitted by all 87 counties and the Western Lake Superior Sanitary District (WLSSD) regarding their SCORE activities. The MPCA uses SCORE to detail trends in waste generation, management, and disposal. Data trends are used to help the MPCA and local units of government develop sound policy and plans to manage waste in a manner that protects the environment and human health.

In 2021:

- **$18 million** for county recycling and waste diversion

In the calendar year of 2019 for All (Statewide), municipal solid waste (MSW) decreased year-on-year (YOY) (-0.8%). The combined recycling and organics rate is 43.5% in 2019 which is a -3.6% change YOY from 2018 numbers.

Statewide, the recycling rate is 43.5% and additional waste was sent to landfills in 2019 vs 2018 due to the closure of Great River Energy which provided Waste-to-Energy (WTE) capacity in the Metro area and surrounding counties.
In 2020:

- $1.8 million in grant awards
- 47 new jobs
- 85,000 more tons of material recycled
Santa Clara County, CA

In 2021:

- $250,000 to launch a food recovery pilot program
- Composting training (UC Cooperative Extension)
In 2021:

- **$580,000** in Waste Prevention Grants
- **$5 million** to municipalities

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**CONGRATULATIONS Alameda County!**

Your progress toward Zero Waste is among the best in the nation.

<table>
<thead>
<tr>
<th>City or Area</th>
<th>Tons to Landfill</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union City</td>
<td>136,488</td>
<td>73%</td>
</tr>
<tr>
<td>Piedmont</td>
<td>9,486</td>
<td>68%</td>
</tr>
<tr>
<td>Albany</td>
<td>18,483</td>
<td>68%</td>
</tr>
<tr>
<td>Alameda</td>
<td>96,383</td>
<td>63%</td>
</tr>
<tr>
<td>Emeryville</td>
<td>26,816</td>
<td>60%</td>
</tr>
<tr>
<td>Hayward</td>
<td>215,837</td>
<td>57%</td>
</tr>
<tr>
<td>Berkeley</td>
<td>155,338</td>
<td>56%</td>
</tr>
<tr>
<td>Unincorporated county</td>
<td>168,590</td>
<td>55%</td>
</tr>
<tr>
<td>Oakland</td>
<td>583,298</td>
<td>54%</td>
</tr>
<tr>
<td>San Leandro</td>
<td>140,782</td>
<td>48%</td>
</tr>
<tr>
<td>Newark</td>
<td>58,398</td>
<td>43%</td>
</tr>
<tr>
<td>Pleasanton</td>
<td>105,692</td>
<td>29%</td>
</tr>
<tr>
<td>Fremont</td>
<td>45,000</td>
<td>28%</td>
</tr>
<tr>
<td>Livermore</td>
<td>86,621</td>
<td>25%</td>
</tr>
<tr>
<td>Dublin</td>
<td>41,707</td>
<td>17%</td>
</tr>
</tbody>
</table>

**TOTAL** 2,058,839 1,035,960 50%

In 1989, more than 60% of Alameda County’s voters directed the county to reduce landfills by 75%. You established the Alameda County Source Reduction and Recycling Board, now part of StopWaste.org. You put a per-ton surcharge on all garbage going to landfill either in the county or from the county. The surcharge funds recycling. It has worked beautifully! As of 2014, despite population increasing, the county has already reduced its garbage to landfill by 50%.

The funding you have devoted to recycling has made Alameda County an international legend in Zero Waste circles. Now the whole world is trying to move in the same direction.

**Alameda County has been leading the way since 1989.** KEEP UP THE GREAT WORK! ONWARD TO ZERO!

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Urban Ore has 3 acres of good used goods. We salvage from the Berkeley transfer station, make pickups, and receive dropoffs. We bring in about 7,000 tons a year and sell for reuse in retail sales. We have 38 jobs with fully paid health benefits for staff and all dependents. StopWaste helped save us when we were in trouble in 2000. Today we’re thriving. THANK YOU!
Lessons Learned and Best Practices:

1. Incentivize waste reduction and recycling
2. Ensure surcharge revenue and waste diversion projects benefit local communities
3. Make grants accessible to small and community-scale projects
Lessons Learned and Best Practices:

- Educate the public on the surcharge, grant programs, and waste management options.
- A designated fund for surcharge revenue should be managed responsibly to avoid unnecessary fund diversion.
Check out our resources to learn more!

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Jennifer Semrau
Wisconsin Department of Natural Resources

Marie Barnett
Ohio Environmental Protection Agency
Pennsylvania: Grant Programs Funded by Disposal Surcharges

Lawrence Holley
Pennsylvania Department of Environmental Protection
Lawrence Holley
Manager, Division of Waste Minimization and Planning
Bureau of Waste Management
Pennsylvania DEP
Overview and history of statewide surcharges on waste disposal

- $7.25/ton total surcharge
  - $2.00/ton Recycling Fee
  - $0.25/ton Environmental Stewardship Fee
  - $4.00/ton Disposal Fee
- $1.00/ton Host Community Fee
Overview of Grant Programs:

Growing Greener Plus Grants

Recycling Grants
Impact of the Grant Programs and Project Examples
Challenges Encountered and Tips for Replication
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Ohio Environmental Protection Agency
Funding Recycling via Disposal Surcharges in WI

Jennifer Semrau, WDNR
February 15, 2022
Background: Wisconsin’s Recycling Law (1990)

- Defines a waste and materials management policy for WI
- Bans certain items from landfilling or incineration
- Establishes local government units to implement recycling
- Partially funds local recycling programs so that bans can be complied with
Landfill and Incineration Bans

Curbside Bin / Recycling Dumpster

- Newspaper, cardboard, magazines, office paper
- Steel/bi-metal and aluminum containers
- Glass containers
- Plastic containers #1 & #2 (PETE & HDPE)

Other Disposal Method Required

- Appliances
- Electronics
- Waste oil & filters
- Vehicle batteries
- Tires
- Yard waste – grass, leaves, brush
Local Government Recycling Programs: Responsible Units (RUs)

Communities organized into RUs

- Includes all Wisconsin communities
- ~1080 RUs; variable jurisdictions

RU duties include:

- Passing an ordinance prohibiting disposal and requiring recycling of landfill-banned materials
- Ensuring compliance; having a compliance assurance plan; enforcing their ordinance
- Providing recycling for residents (single family and 2–4-unit properties)
- Informing and educating residents and businesses
- Submitting an annual report
Recycling Grant Program

- Partially offsets the costs in implementing the mandatory recycling program
- Only RUs are eligible
- May be used for residential recycling and yard waste program costs that are reasonable and necessary for planning and operating an effective recycling program

**Eligible costs**
- Residential and 2-4 unit household recycling and yard waste program costs (net of the sale of recovered materials). Examples include but are not limited to:
  - education & outreach materials;
  - collection/transport of residential recyclables;
  - RU employee salary, wages and benefits;
  - utility services;
  - contractual (purchased) services; and
  - rents and leases
  - depreciation on capitalized equipment and facilities (infrastructure)

**Ineligible costs include** collection of recyclables or yard waste from governmental, businesses and residential housing larger than 4 units
Recycling Grant Program

- Presently, $20 million/year
- Funded by MSW tipping fee surcharge
  - Presently $12.997/ton
  - Of that $7.00/ton ‘recycling fee’
  - Recycling fee generates $37-$40M/yr
  - Deposited in the Environmental Management Account (EMA)

Source: Legislative Fiscal Bureau informational paper #66
“Recycling Financial Assistance Programs” Jan. 2021
Breakdown of MSW Tipping Fee Surcharge

Source: Legislative Fiscal Bureau informational paper #64
“Environmental Management Account” Jan. 2021

Table 1: State Solid Waste Tipping Fees Per Ton

<table>
<thead>
<tr>
<th>Fund, Fee</th>
<th>Type</th>
<th>Municipal and Non-High-Volume Industrial Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental management account - Recycling (recycling fund prior to 2011-12)</td>
<td>SEG</td>
<td>$7.000</td>
</tr>
<tr>
<td>Environmental management account - Environmental repair</td>
<td>SEG</td>
<td>2.500</td>
</tr>
<tr>
<td>Environmental management account - Groundwater</td>
<td>SEG</td>
<td>0.100</td>
</tr>
<tr>
<td>Environmental management account - Well compensation</td>
<td>SEG</td>
<td>0.040</td>
</tr>
<tr>
<td>Subtotal Environmental Management</td>
<td></td>
<td>$9.640</td>
</tr>
<tr>
<td>Nonpoint account</td>
<td>SEG</td>
<td>3.200</td>
</tr>
<tr>
<td>DNR Solid Waste landfill administration</td>
<td>PR</td>
<td>0.150</td>
</tr>
<tr>
<td>DOA Solid Waste Facility Siting Board</td>
<td>PR</td>
<td>0.007</td>
</tr>
<tr>
<td>Subtotal Nonpoint/Program Revenue Accounts</td>
<td></td>
<td>$3.357</td>
</tr>
<tr>
<td>Total State Tipping Fee</td>
<td></td>
<td>$12.997</td>
</tr>
</tbody>
</table>
Considerations for Replication

• Eligible recipients
  • Municipalities only (WI)
  • Or businesses, institutions, non-profits, etc.?

• To whom it applies
  • Does not apply to C&D landfills in WI
  • Many do not have scales

• Competitive vs Non-competitive
  • WI: non-competitive, all eligible RUs get a piece of the grant pie
  • Results in some very small grant amounts

• If successful at waste diversion (preferred over recycling), revenue source declines
CONNECT WITH US

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"WILD WISCONSIN: OFF THE RECORD"
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Ohio Environmental Protection Agency
Webinar hosted by
Institute of Local Self-Reliance
February 15, 2022

Any opinions, findings, conclusions, or recommendations expressed by others during this webinar do not necessarily reflect the views of DNR.
44 Solid Waste Comprehensive Planning Areas with Waste Flow Control
## Tiered Tonnage Fee Rates: Incentivize Diversion (Waste Reduction & Recycling)

<table>
<thead>
<tr>
<th>Diversion*</th>
<th>Collect</th>
<th>Retain</th>
<th>Remit</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% State Goal</td>
<td>$3.25</td>
<td>$1.30</td>
<td>$1.95</td>
</tr>
<tr>
<td>36% (State Base-Year Av.)</td>
<td>$3.65</td>
<td>$1.45</td>
<td>$2.20</td>
</tr>
<tr>
<td>25% State Goal</td>
<td>$3.65</td>
<td>$1.55</td>
<td>$2.10</td>
</tr>
<tr>
<td>&lt;25%</td>
<td>$4.75</td>
<td>$1.45</td>
<td>$3.30</td>
</tr>
</tbody>
</table>

*Rate using Diversion Calculation with Base Year Adjustment

*(Iowa Code 455B,455D)*
Diversion Rate Calculation (expressed as percentage)

\[
100\% - \left( A \left( \frac{H}{C} + \frac{1}{2} \right) + B \left( \frac{I}{D} + \frac{J}{2E} \right) \right) \times 100\%
\]

<table>
<thead>
<tr>
<th>Base Year (1988 for most)</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Residential Waste Disposal (tons)</td>
<td>G  Waste Disposal (tons)</td>
</tr>
<tr>
<td>B  Commercial Waste Disposal (tons)</td>
<td>H  Population</td>
</tr>
<tr>
<td>C  Population</td>
<td>I  Employment (non-farm)</td>
</tr>
<tr>
<td>D  Employment (non-farm)</td>
<td>J  Taxable Sales</td>
</tr>
<tr>
<td>E  Taxable Sales</td>
<td>K  Consumer Price Index</td>
</tr>
<tr>
<td>F  Consumer Price Index</td>
<td></td>
</tr>
</tbody>
</table>

IAC 567—101.7 (Rule for 455B, 455D)
### Tons Subject to Tonnage Fees

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Tons</td>
<td>2,786,130</td>
<td>2,935,669</td>
<td>3,043,697</td>
<td>3,243,415</td>
<td>3,524,739</td>
<td>3,910,238</td>
</tr>
<tr>
<td>Tonnage Fees</td>
<td>$6,111,661</td>
<td>$6,313,848</td>
<td>$6,493,492</td>
<td>$6,988,834</td>
<td>$7,539,408</td>
<td>$8,367,358</td>
</tr>
<tr>
<td>Average Fees/Ton</td>
<td>$2.19</td>
<td>$2.15</td>
<td>$2.13</td>
<td>$2.15</td>
<td>$2.14</td>
<td>$2.14</td>
</tr>
</tbody>
</table>

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**FY2016 to FY2021:**

- **All Tons:** Year-over-year increase from 2,786,130 tons in FY2016 to 3,910,238 tons in FY2021.
- **Tonnage Fees:** Increase from $6,111,661 in FY2016 to $8,367,358 in FY2021.
- **Average Fees/Ton:** Fluctuates slightly, with a peak of $2.19 in FY2016 and a trough of $2.13 in FY2018.
**Tonnage Fee Distribution**

**Solid Waste Account of Groundwater Protection Fund**

Distribution based on FY2021 tons

### Solid Waste Alternative Program divisions:
- Derelict Building Program
- Environmental Mgt System Program
- Solid Waste Alternative Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR Solid Waste Operations</td>
<td>$0.74/ton</td>
</tr>
<tr>
<td>Iowa Waste Reduction Ctr</td>
<td>$0.25/ton</td>
</tr>
<tr>
<td>Iowa Waste Exchange</td>
<td>$0.10/ton</td>
</tr>
<tr>
<td>Regional Coll Ctr (establishment)</td>
<td>$0.05/ton</td>
</tr>
<tr>
<td>Regional Coll Ctr (disp reimb)</td>
<td>$0.15/ton</td>
</tr>
<tr>
<td>Toxic Clean-Up Days, GIS, Business Loan Reimbursement</td>
<td>$0.13/ton</td>
</tr>
<tr>
<td>Economic Dev Authority</td>
<td>$0.05/ton</td>
</tr>
<tr>
<td>Waste Reduction &amp; Asst Prgm</td>
<td>$0.08/ton</td>
</tr>
<tr>
<td>Special Waste Authrz Prgm</td>
<td>$50,000/yr</td>
</tr>
<tr>
<td>Iowa Waste Exchange</td>
<td>$165,000/yr</td>
</tr>
<tr>
<td>Solid Waste Alternatives Prgm*</td>
<td>Remainder</td>
</tr>
</tbody>
</table>

*Solid Waste Alternative Program divisions:
Pollution Prevention Program (P2)

Non-regulatory, confidential, technical assistance to reduce/eliminate waste at the source:
- Assessments of energy, water & waste
- Internship program
- Workshops, trainings & EMS assistance
- Resource library

<table>
<thead>
<tr>
<th>Implemented Reductions by Clients as a Result of Internships*</th>
<th>FY2021</th>
<th>21-Yr History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Savings</td>
<td>$328,376</td>
<td>$111,800,000</td>
</tr>
<tr>
<td>Water (gal)</td>
<td>47,190,000</td>
<td>5,700,000,000</td>
</tr>
<tr>
<td>Solid/Spec Waste (tn)</td>
<td>586</td>
<td>258,000</td>
</tr>
<tr>
<td>Hazardous Waste (tn)</td>
<td>11.5</td>
<td>10,016</td>
</tr>
<tr>
<td>kWh</td>
<td>2,300,000</td>
<td>504,200,000</td>
</tr>
<tr>
<td>Therms</td>
<td></td>
<td>22,220,000</td>
</tr>
</tbody>
</table>

*Funded through Tonnage Fees with USEPA assistance.
Iowa Waste Exchange

Free, confidential matching for exchange of waste materials and by-products – putting materials back into productive use.

<table>
<thead>
<tr>
<th>Benefits for Clients</th>
<th>FY2021</th>
<th>31-Yr History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>$6,888,039</td>
<td>$130,063,494</td>
</tr>
<tr>
<td>Diversion (tn)</td>
<td>131,949</td>
<td>4,372,813</td>
</tr>
</tbody>
</table>

Contracted services are funded 100% through Tonnage Fees. Served 4,024 clients in FY2021 and 74,321 clients overall.
Regional Collection Centers for Hazardous Waste Collection

<table>
<thead>
<tr>
<th></th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants*</td>
<td>$118,887</td>
</tr>
<tr>
<td>Program Support*</td>
<td>$711,990</td>
</tr>
<tr>
<td>Reused locally (lbs)</td>
<td>321,319</td>
</tr>
<tr>
<td>Disposed (lbs)</td>
<td>912,555</td>
</tr>
<tr>
<td>Managed locally (lbs)</td>
<td>6,671,575</td>
</tr>
<tr>
<td>Total Managed (lbs)</td>
<td>7,905,449</td>
</tr>
<tr>
<td>Recycled rate</td>
<td>74%</td>
</tr>
</tbody>
</table>

*100% through Tonnage Fees

Grants and program support for diversion and proper management of materials collected at 28 main facilities and 44 satellite facilities:
- Household Hazardous Waste (also VSQG)
- Electronics
- Appliances
- Bulbs and batteries
- Paints and motor oil

BRING IT IN. WE ALL WIN!
## Derelict Building Program

Grants to remove hazards and reuse/recycle building materials from empty structures owned by small cities. Funding assistance for:
- Asbestos inspections/abatement
- Structural engineering analysis
- Phase I & II site assessments
- Building renovation/deconstruction

<table>
<thead>
<tr>
<th></th>
<th>FY2021</th>
<th>9-Yr History</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Awards</td>
<td>12</td>
<td>165</td>
</tr>
<tr>
<td>Grants*</td>
<td>$399,207</td>
<td>$4,112,893</td>
</tr>
<tr>
<td>Local Cost-Share</td>
<td>$188,782</td>
<td>$3,076,863</td>
</tr>
<tr>
<td>Total</td>
<td>$587,989</td>
<td>$7,189,756</td>
</tr>
<tr>
<td>Asbestos Abated</td>
<td>38.5 Tons</td>
<td>1,198 Tons</td>
</tr>
<tr>
<td>Diversion</td>
<td>2,245 Tons</td>
<td>69,478 Tons</td>
</tr>
<tr>
<td>Diversion Rate</td>
<td>88%</td>
<td>91%</td>
</tr>
</tbody>
</table>

*100% through Tonnage Fees
Environmental Management System (EMS)

A voluntary alternative to Comprehensive Planning for solid waste agencies:
- Financial incentives
- Technical support
- Credit for environmental efforts beyond diversion

<table>
<thead>
<tr>
<th></th>
<th>FY2021</th>
<th>11-Yr History</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Awards</td>
<td>17</td>
<td>139</td>
</tr>
<tr>
<td>Grants Awards*</td>
<td>$314,419</td>
<td>$3,454,493</td>
</tr>
<tr>
<td>Local Cost-Share</td>
<td>$296,666</td>
<td>$7,104,916</td>
</tr>
<tr>
<td>Total</td>
<td>$611,085</td>
<td>$7,104,916</td>
</tr>
</tbody>
</table>

*100% through Tonnage Fees
Environmental Actively pursuing six program components

- Organics Management
- Household Hazardous Materials Collection
- Water Quality Improvement
- Greenhouse Gas Reduction
- Recycling Services
- Environmental Education

Management System Implementing a framework of ten elements

1. Environmental Policy Statement
2. Environmental Impacts
3. Objectives & Targets
4. Action Plan
5. Identify Roles & Responsibilities
6. Communication, Training & Awareness
7. Monitoring & Measurement
8. Assessment
9. Reevaluation and Modification
10. Legal & Other Requirements

For continuous improvement

- Plan
- Do
- Act
- Check
Environmental Management System (EMS)

Water Quality Improvement Program Component

10 Year Impact:
478,293 pounds of litter collected;
387 acres of land improvements
Environmental Management System (EMS)

Greenhouse Gas Reduction Program Component

10 Year Impact in GHG reduction:
12,471 tons from energy efficiency improvements;
2,500,000 tons from landfill diversion
Solid Waste Alternatives Program (SWAP) Financial Assistance

Financial assistance to reduce waste and reliance on landfills:
• Competitive process for loans – forgivable, no interest & low interest
• Open to public and private applicants
• Projects for reduction, reuse, recycling, composting & awareness

<table>
<thead>
<tr>
<th>Program Results</th>
<th>FY2021</th>
<th>33-Yr History</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Awards</td>
<td>7</td>
<td>929</td>
</tr>
<tr>
<td>Grants &amp; Loans</td>
<td>$121,002</td>
<td>$65,230,101</td>
</tr>
<tr>
<td>Contractor Match</td>
<td>$191,068</td>
<td>$144,639,749</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>$312,070</td>
<td>$209,869,850</td>
</tr>
<tr>
<td>Diversion - Exclusive to Agreement Reporting Periods</td>
<td>4,298,840 tons</td>
<td></td>
</tr>
</tbody>
</table>

*Funded through Tonnage Fees & loan interest.*
Solid Waste Alternatives Program (SWAP) - Funded Initiative: Food Storage Grants

Swift and significant response to pandemic and derecho with a grant opportunity for food banks/pantries:
- Energy-Star Refrigerators & Freezers
- Shelving

<table>
<thead>
<tr>
<th># of Awards</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants Awards</td>
<td>&gt;$400,000</td>
</tr>
<tr>
<td>100% through Tonnage Fees</td>
<td></td>
</tr>
</tbody>
</table>
Solid Waste Alternatives Program (SWAP) - Funded Initiatives: Waste Characterization Studies
Solid Waste Alternatives Program (SWAP) - Funded Initiative: Sustainable Materials Management – Vision for Iowa

An approach to using and reusing materials most productively throughout their entire life cycles.

Current:

Exploring:
Tonnage Fees Summary
Solid Waste Account of Groundwater Protection Fund

Results for Iowans:
- Environmental Impacts
- Economic Incentives/Savings
Panelist Presentations

Sophia Jones
Institute for Local Self-Reliance

Laurie Rasmus
Iowa Department of Natural Resources

Lawrence Holley
Pennsylvania Department of Environmental Protection

Wendy Worley
North Carolina Department of Environmental Quality

Jennifer Semrau
Wisconsin Department of Natural Resources

Marie Barnett
Ohio Environmental Protection Agency
Funding Recycling Infrastructure via Disposal Surcharges

Recycling and Materials Management Section
Division of Environmental Assistance and Customer Service
North Carolina Department of Environmental Quality
NC § 130A-309.06 establishes NC DEQ duties to promote and assist development of waste reduction and recycling programs

NC § 130A-309.12 Solid Waste Management Trust Fund

Provide technical and financial assistance for:
- Local government recycling programs
- Recycling market development

Early funding sources for SWM Trust Fund:
- Portion of advanced disposal fees for white goods and tires
Primary Funding Cycles:
- Private Recycling Business Development Grants
- Public/Local Government Recycling Grants

Peak $2.8M in FY2013-14

35-80 public & private projects funded per year

Accountability through competitive grant cycles, reimbursement only, matching requirements
2008

NC § 105-187.60 – 63

- Passed 2007 Senate Bill 1492
- Implemented July 1, 2008
- $2 per ton MSW and C&D waste disposed in NC landfills and on transfer of waste out of state for disposal
- Original allocation of funds:
  - 50% Inactive Hazardous Sites Clean-up Fund
  - 37.5% City and county solid waste management programs (on per capita basis)
  - 12.5% Solid Waste Management Trust Fund – for recycling grant-making
Local government funds
- Half to cities and half to counties
- Distributions on a per capita basis to eligible LGs
- Must be used for solid waste and recycling programs & services
2013

NC § 130A-309.13 Solid Waste Management Outreach Program

Redirected 12.5% of SWM Trust Fund allocations to the General Fund

Maintained grant-making authority and function as before

Provide technical and financial assistance for:
- Local government recycling programs
- Recycling market development

Since 2013, the General Assembly has allocated $1.1 M annually for grant-making through individual budget bills
Broad legislative mandate allows flexibility to adjust priority projects within public & private grant rounds

*Result: targeted, strategic grant programs*

Priority projects identified in standard community and recycling business development cycles

Targeted grant cycles for infrastructure priorities to address new challenges and needs
Targeted Recycling Grant Programs

- ABC Recycling Collection Infrastructure \(\text{(in response to law requiring recycling of cans & bottles at NC bars and restaurants)}\)
- Bins-to-Carts Recycling Collection Conversion
- Hub and Spoke recycling collection systems
- Community Convenience Center conversions to single-stream collection
- Regional Recycling Infrastructure Development \(\text{(need for regional processing capacity)}\)
- COVID-19 Recycling Support
- Community Backyard Composting
## Loss of Revenue to NC Recycling Grant-Making

General Assembly - $1.1 million allocated for recycling grant-making since 2013

### NC Disposal Tax Revenue and Allocations to the General Fund by Fiscal Year

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Revenue Collected</th>
<th>General Fund Allocation</th>
<th>Loss to Grant Making via SWMTF*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2018-19</td>
<td>$ 22,449,345</td>
<td>$ 2,796,135</td>
<td>$ 1,696,135</td>
</tr>
<tr>
<td>FY2019-20</td>
<td>$ 23,114,039</td>
<td>$ 2,881,772</td>
<td>$ 1,781,772</td>
</tr>
<tr>
<td>FY2020-21</td>
<td>$ 23,140,538</td>
<td>$ 2,890,958</td>
<td>$ 1,790,958</td>
</tr>
</tbody>
</table>
Wendy Worley, Section Chief
Recycling and Materials Management Section
wendy.worley@ncdenr.gov
Phone: 919-707-8136
Panelist Presentations

Sophia Jones  
Institute for Local Self-Reliance

Laurie Rasmus  
Iowa Department of Natural Resources

Lawrence Holley  
Pennsylvania Department of Environmental Protection

Wendy Worley  
North Carolina Department of Environmental Quality

Jennifer Semrau  
Wisconsin Department of Natural Resources

Marie Barnett  
Ohio Environmental Protection Agency
Waste Disposal Surcharge and Recycling and Litter Prevention Funding

Funding Recycling Infrastructure via Disposal Surcharges
ILSR Panel Discussion
Ohio EPA - Division of Environmental and Financial Assistance
Feb. 15, 2022
Agenda

- Overview of Ohio waste disposal fees
- Overview of the funded grant program(s)
- Impact of grant program
- Grant money at work
- Tips for successful grant program
Ohio Waste Fees

-State Disposal Fee ($4.75/ ton of solid waste)
  - Collected at transfer facilities and landfills, wherever waste accepted first
  - Used to administer environmental regulatory programs

-Solid Waste Management District Fees*
  - Disposal Fee (amount depends upon origin of waste)
  - Generation Fee (no set amount)
  - Planning Fee (≤ $0.50/ton solid waste)
  *Used to implement solid waste management plan

-Host Community Fee (≤ $0.25/ ton of solid waste)
  - Collected at landfills
  - Levied by cities and townships for costs incurred from hosting a landfill (road repair, emergency services, etc.)
Ohio Waste Fees continued

- **Construction and Demolition Debris Fee**
  - $1.60/ton or $0.80/cu yard
  - Used to administer environmental regulatory programs
  - Funds recycling and litter prevention grants

- **Scrap Tire Fee**
  - $1.00/new tire sold
  - Used to administer environmental regulatory program and scrap tire dump remediation
  - Funds scrap tire grants
Grant Program Overview

- Started in 1980 at ODNR
- Recycling and Litter Prevention Grant Program joined Ohio EPA in 2012
- Multiple sources of funding
  - $0.60 per ton disposal fee C&DD
  - $0.50 fee on new tire purchases
Grant Program Overview

Program supports communities, non-profits, businesses and academic institutions through 4 grants:

- Recycling Infrastructure (up to $200,000);
- Litter Cleanups and Tire Amnesty Events (up to $40,000);
- Outreach and Education (up to $50,000);
- Scrap Tire Processing and Civil Engineering Projects (up to $300,000)
- Litter Surveillance Cameras (up to $25,000)
Impact of Grant Program

In 2018, Ohio EPA’s Recycling and Litter Prevention Grant Program awarded $2,127,385 in grant funds to local Ohio governments, communities and non-profits, which helped leverage an additional $3,830,330 in matching funds to support recycling, litter prevention and education/outreach efforts.

- 2,610 miles of roadside picked up
- 175 miles of shoreline cleaned
- 11,966 bags of litter collected
- 94,896 lbs. of materials recycled
- 108,376 scrap tires collected
- 9,984 volunteers worked 23,535 hours
- 156 education presentations with 7,959 participants
- 177 community clean up activities
Grant Money at Work

**Knox County**

- Annual Kokosing River cleanup
  - 28 river miles
  - Funds cover supplies and disposal fees
  - Hundreds of volunteers
  - Nearly 30 community partners

**Ohio University**

- Organic waste collection, processing and diversion
- New bins, collection carts, truck and conveyor
- Diverted more than 112 tons of food waste in 2020
Grant Money at Work

 komen Paint Recyclers

- Expanded their latex paint recycling operation
  - Forklift, mixer and filtration system

Stark-Tuscarawas-Wayne Recycling District

- Drop-off recycling contamination reduction project
  - New recycling bin labels and signs
  - Cameras to deter dumping at recycling sites
  - Contamination rates dropped from 65% to between 15 and 5%
Tips for Successful Grant Program

- Promote program and successful projects.
- Stay connected with stakeholders and recycling/litter prevention trends.
- Projects must align with the strategic goals of solid waste management plans.
- Projects must have a positive regional or statewide economic and environmental impact.
- Grant administrative assistance and oversight is important.
  - No outstanding financial or compliance issues with applicant.
  - Financial requirements and safeguards when funding private businesses
For more information

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