

TOLD

Trash On the Lawn Day Training Guide



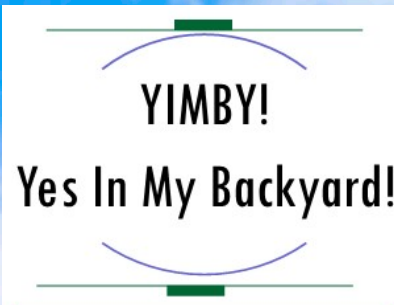
How to Plan and Perform a School-wide Waste Audit

WELCOME COMMUNITY EDUCATORS AND ENVIRONMENTAL AMBASSADORS

Northeast Resource Recovery Association (NRRA) is pleased to present today's training which is made possible by a generous grant from the U.S Dept. of Agriculture Rural Development with the following goals:

1. Raise awareness of the opportunities in the community to divert food from landfill disposal (or incineration) by connecting the mid-scale generator, solid waste facility, processing treatment facility, composting facility, and food waste facility.
2. Expand NRRA's TOLD (Trash On The Lawn Day) technical assistance program for schools.
3. Reduce the environmental pollution and human health hazards associated with exploding and mismanaged batteries both rechargeable and single use.





Thanks to the USDA Rural Utility Service, the program training is free. The goal of the program is for the trained participants to work together on creating a safer environment, knowledgeable staff on the proper storage and handling of hazardous materials and working in conjunction on solid waste issues.



About Us

In 1981, four New Hampshire municipalities founded the Northeast Resource Recovery Association, then called the New Hampshire Resource Recovery Association, to provide a clearinghouse for current, up-to-date information and a source of technical and marketing assistance in the general areas of waste reduction and recycling.

As amended July, 1995

Articles of Agreement
of
Northeast Resource Recovery Association
(formerly New Hampshire Resource Recovery Association)

Article 1. The name of this corporation shall be

Northeast Resource Recovery Association

Article 2. The object for which this corporation is established is

as a clearinghouse for relevant information, as a source of education in the field of solid waste management, as a cooperative agent with state, regional and local governmental agencies, as a market development service.



NRRA Coverage Area

- ✓ Vermont
- ✓ New Hampshire
- ✓ Southern Maine
- ✓ Northern Massachusetts
- ✓ Connecticut
- ✓ Rhode Island
- ✓ Any NRRA member town



NRRRA's School Recycling CLUB

School Workshops



School News You Can Use Newsletter



Technical Assistance



Annual School Conference

theclub@nrra.net



Northeast Resource Recovery Association

School Recycling CLUB





Classroom Workshops

- **Healthy Home, Clean Waters**
- **Waste = Global Climate Change**
- **Back to the Earth**
- **Garbage Guerrillas**

School Technical Assistance

- **Green Cleaning & IAQ Evaluation & Review**
- **Trash On the Lawn Day (TOLD)**
- **Star Assessment**

M.O.M. and NRRA Workshops



M.O.M.: Members/Operations/Marketing
monthly meetings

In addition, NRRA conducts workshops and facility tours several times a year that can be used for continuing education credits toward transfer facility operator certifications and renewals.

NRRA SW FACILITY OPERATOR TRAINING MODULES

(Professional development credits where applicable)

1. Operator Smack Down! A Safety and Public Relations Training for Waste Facility Operators
2. Things That Go BOOM! And Other Regulated Waste
3. Act 148 - VT's Universal Recycling Law: What Do I Need to Know?
4. The Dirt on Dirt: Municipal Composting 101
5. Processed Glass Aggregate: A Certified Waste Derived Product
6. China Sword: Current Market Trends in Recycling



RECYCLING STILL RULES

and it's
COOL in SCHOOL!



School
Recycling
CLUB

10th Annual School Recycling Conference

Tuesday, May 21, 2019

Double Tree by Hilton

Manchester Downtown

700 Elm St., Manchester NH 03101

Call 800.223.0150 to register
or learn more at: www.NRRA.net

Presented by Northeast Resource Recovery Assoc.
NH the Beautiful and NRRA School CLUB



Northeast Resource
Recovery Association

School
Recycling CLUB



TOLD

Trash On the Lawn Day Training Guide



How to Plan and Perform a School-wide Waste Audit

TOLD Preview

Maple Ave TOLD featured on WMUR :



Credit: WMUR

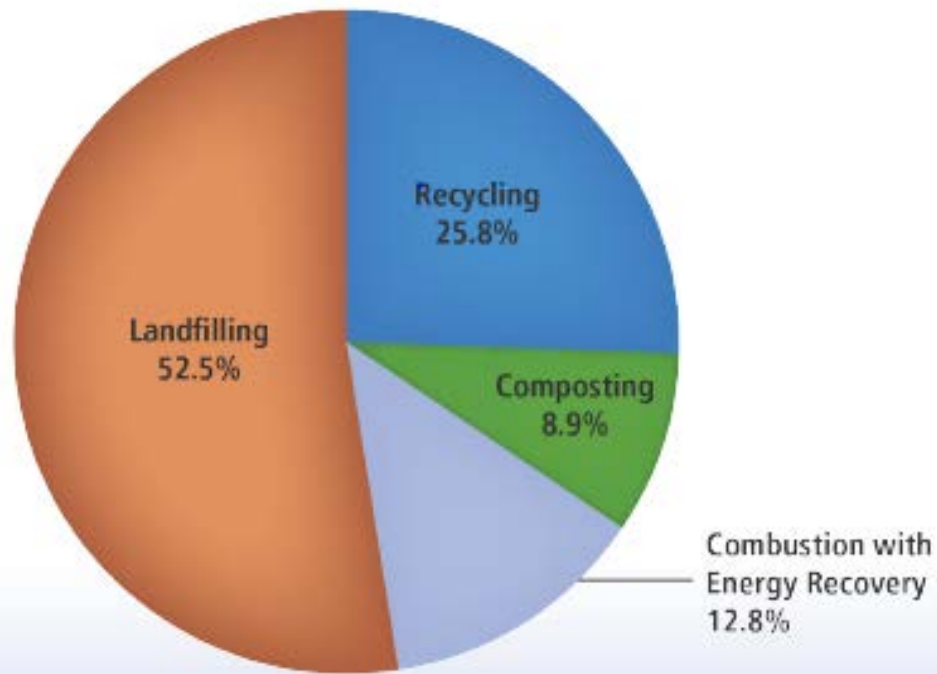
Why Trash On the Lawn Day?

- Collect baseline data regarding waste generation and management.
- Use data to target improvements on campus.
- Service to your school community.
- Leadership development.
- Grow your environmental club.
- Learn about important environmental issues.
- Great addition to student college applications and resumes.



To Tip the Scales on Waste

Figure 3. Management of MSW in the United States, 2015



<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/advancing-sustainable-materials-management>

Four Major Steps

- Envisioning and Action Planning
- TOLD Audit Planning
- TOLD Event
- Students analyze and create the presentation of the Results & Action Plan Implementation.

Actions We Will Review

1. **Planning** – Core group
2. **Setting Goals** – Short-term and long-term goals
3. **Identifying stakeholders** – Volunteers, custodial staff, etc.
4. **Job assignments** – Promotion, day before, day of, clean up, etc.
5. **Selecting location**
6. **Materials needed**
7. **Doing the waste audit** – What to expect
8. **Presenting the results**
9. **Best practices** – Tips and techniques

Envisioning and Action Planning

- Why should we do a waste audit?
- What do we want to accomplish?
- What are the lessons we want to teach?
- Develop an action plan by thinking about short- and long-term goals.
- How will we reach those goals?
- What is our timeline?
- How will we know if we have reached our goals?

1. Planning

- **Who is part of the core group? Who should be at your planning meetings?**
 - Interested club members
 - Student volunteers
 - Adult advisor(s)
 - Head grounds/custodial staff member

TOLD Planning Schedule

- Choose a date
- Schedule a planning meeting (2-3 weeks before event)
- TOLD Event
- Post TOLD Actions

2. Setting Goals

Examples of short term goals:	Examples of long term goals:
Start a recycling program at our school	Reach a 95% recycling rate
Start composting pre-consumer organic waste	Launch a post-consumer composting program
Replace milk cartons with recyclable plastic jugs	Purchase a bulk milk dispenser for cafeteria
Encourage students to bring less waste from home in lunches	Establish a zero waste agenda for all lunches
Replace plastic utensils with biodegradable ones	Purchase metal utensils
Increase awareness of already-existing composting program and expose problems with contamination	Increase organics diversion to 95% and eliminate contamination completely
Raise money for the environmental club to fund outreach initiatives	Renegotiate the school's hauling contract to better reflect the needs and values of waste diversion
Build a greenhouse	Develop a closed loop system, including a greenhouse, composting system, and local foods menu

3. Identifying Stakeholders

After the core group has outlined their action plan, hold well-advertised TOLD planning meetings for all those interested in helping out.

- Interested club members
- Student volunteers
- Adult Advisor(s)
- Head grounds/custodial staff member(s)

Identifying Stakeholders - Continued

- Administrators
- Maintenance staff
- Business managers
- Community members & organizations (your solid waste district)
- Other teachers

TOLD Audit Planning

- Where should the audit take place?
- **Visibility**
- **Sorting**
- **Clean up**

Make sure the custodian has saved all trash from the previous day (NO bathroom or nurse's station waste); you'll need about 2-3 bags per group (set to one side near weigh station)

Planning Continued

- When should the event be held?
- When should the results be presented?
- When will the event organizers meet following the event to discuss next steps?

4. Job Assignments

Pre-TOLD Jobs:

Marketing/Publicity:

Sign/Poster Makers

Press Alert/Release Writers

Media Contactor

Label Makers

Materials Finders

Custodian Reminder-hold 1 day of trash
(minus bathroom or medical waste)

TOLD 'Day of' Jobs:

Waste sorters/helpers

1 Emcee (micro or megaphone?)

Tour Guide(s)

Data Weigher(s)

Data Collector(s)

Photo/Videographer

Litter collectors if windy

Custodial helpers

5. Selecting Location

- Where is the most visible place to complete the audit so that classes can easily access, view and participate in it?
- Where is the most logical place to separate the waste with regards to moving trash and cleaning up afterwards? Are the dumpsters nearby? Is there a hose available? Is there an electrical outlet?
- Be sure to allow for wind and septic smells in your location selection.
- Be sure your posters, flyers and announcements include the date and location of the waste audit!
- Don't forget appropriate clothes – no open-toed or high heeled shoes; jeans are recommended; dress for the weather.

6. Materials Needed

- 5 gallon buckets
- Tarps (weights for the corners or ground anchors through grommets)
- Rubber/ Garden gloves & aprons
- Signs for each category (trash, paper, compost, etc.)
- Large plastic bags to weigh trash & recycling before & after
- Writing utensils/markers
- Tape and paper (to label bags)
- Data collection sheets (define categories of all recyclables)
- Clip boards; table & chair for recording weights on computer
- Trash (1 day of school waste-no bathroom or medical waste)
- Scales (common household is fine)
- Volunteers (in work clothes and close-toed shoes/boots)
- Canopy or pop-up tents (if rainy) or alternative indoor location
- Snow-fencing (if windy)

7. Doing the Waste Audit

- Determine if your TOLD will be inside or outside based on the day's weather.
- Make sure to allow at least 1 hour to: place your tarps, set up your bags and signs, set out gloves & aprons, set up your weigh station, set up a tent or canopy if needed.
- Announce to each group the importance of keeping recyclables out of the landfill; explain what can and can't be recycled or composted in the community. Review the separate bins and labels; point out any special fundraising collections (pouches, markers, etc.).
- From each group, assign student monitors for each bin to make sure materials are going into the correct bin and to swap out the full bag with an empty when needed.

Example Schedule

Session	Time	Grade	# of students
<i>Setup</i>	8:15-9:10	EKC Helpers:	tbd
Session 1	9:15-10:00	K	45
Session 2	10:05-10:50	3	42
Session 3	10:55-11:40	5	44
Session 4	11:45-12:30	4	35
Lunch for TOLD Staff	12:30-1:00		
Session 5	1:00-1:45	1	43
Session 6	1:50-2:35	2	43
<i>End of day cleanup</i>	2:35-3:05	EKC Helpers:	tbd



Kensington Elementary
School

Activities and Ideas



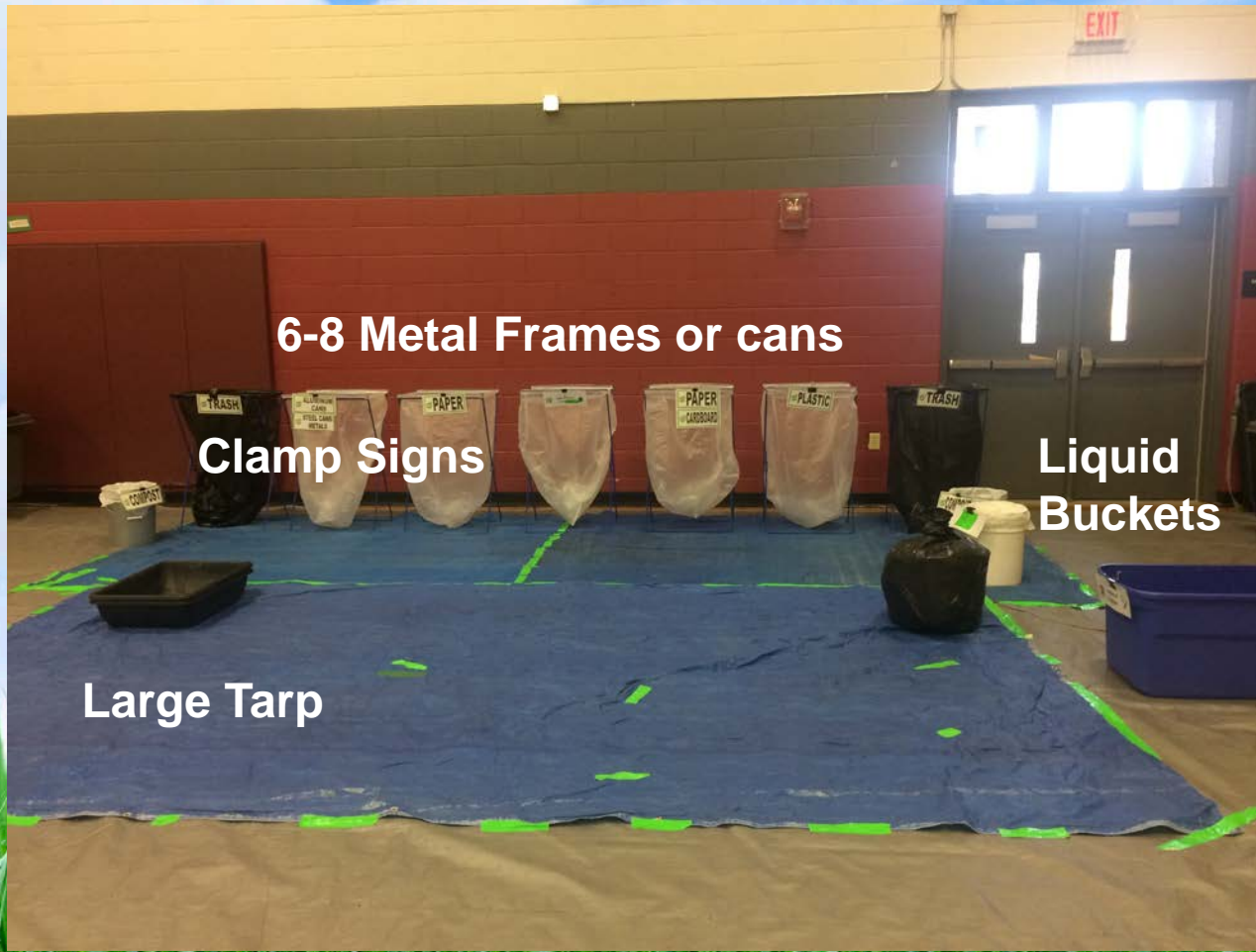
NRRA Photo



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TOLD Event



6-8 Metal Frames or cans

Clamp Signs

Liquid Buckets

Large Tarp

NRRA Photo



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Putting Bags on Frames



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Supply Table/Weigh Station



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Prepare to Sort



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Let the Sorting Begin



NRRA Photo



Collecting Data

FIELD DATA SHEET					
		SCHOOL: _____			
		DATE: _____			
UNSORTED			SORTED		
BAG #	WEIGHT	CODE	BAG #	WEIGHT	CODE

CODES					
A	Aluminum	G	Glass	S	Steel/Metal
CB	Cardboard	PL	Plastic	TF	Terracycle/Fundraiser
FD	Food/Compost	PPR	Paper	TR	Trash



Doing the Waste Audit - Continued

- Assign students to weigh bags (before & after sorting) and enter data. Select students volunteers to sort the trash (6-7). Weigh bags and empty trash onto the tarps (2-4 bags per group depending on group size and trash available). When collection bins are full have the monitors swap them out.
- NOTE: Allow at least 1 hour (before final bell) to clean up and pack materials for storage.

8. Presenting the Results

Bags Sorted,
Total Weight
Unsorted,
Average Weight

Contents of
sorted trash
by weight and
percentage of
overall weight.

Bag
Weights

TRASH ON THE LAWN DAY DATE:

Sort	Daily	Yearly (Based on 190 days/Yr)	\$ Value (Based on Pricing Guide)	Yearly Cost
Bags Sorted:	11	2,090		
Total Weight Unsorted	175.00	33,250.00	\$ (0.060)	\$ (1,995.00)
Average Weight	15.90909			

Contents	Daily Weight	Yearly Weight	Current Value	Annual Value
Trash	92.00	17,480.00	\$ (0.060)	\$ (1,048.80)
Compost (incl. liquids)	45	8,550.00	\$ 0.025	\$ 213.75
Cardboard (incl. milk cartons)	2	380.00	\$ 0.053	\$ 19.95
Plastics	10	1,900.00	\$ 0.030	\$ 57.00
Paper	22	4,180.00	\$ 0.013	\$ 52.25
Steel Cans/Metals	2	380.00	\$ 0.048	\$ 18.15
Aluminum Cans	2	380.00	\$ 0.610	\$ 231.80
Glass	0	-	\$ (0.015)	\$ -
Total	175	100%		

Sort	Daily	Yearly	\$ Value	Yearly Cost
Daily Trash (in # of Bags)	11			

Bag Weights:	Weight
1	20
2	30
3	10
4	10
5	6
6	36
7	8
8	5
9	10
10	20
11	20
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
TOTAL WEIGHT UNSORTED	175

\$ (455.90) Estimated Cost or Potential Revenue (Fully sorted)
 \$ 1,539.10 TOTAL YEARLY POTENTIAL SAVINGS (Savings in disposal fees + recycling revenue)

Compost shown as a (charge) if shipped
 * Compost shown as a positive value if used on site

SPECIAL COLLECTIONS: 22 Markers/Highlighters
 4 Boxtops for Education
 .5 lb. Terracycle Wrappers

SAMPLE DATA SHEET

Values are subject to change
Last updated: 10/19/17

Estimated
Cost or
Potential
Savings

Total Year
Potential
Savings

Presenting the Results - Continued

Once the audit is complete:

- What do the results of the audit suggest as the biggest opportunity for positive change?
- What is the best way to convey the results of the audit to the entire school community?
- How do you implement your new action plan? When should you have the kick-off?
- What obstacles do you face and what opportunities are presenting themselves?
- Should you have another TOLD next year to compare your waste audit today to your improvements of the future?



9. Best Practices

Document the audit: Have someone film or take pictures and make a video or slideshow that can be played for the school and for future TOLD planners.

Host the audit in a visible place and make colorful signs.

Designate “tour guides” or “MC’s” to talk to and engage everyone who participates in or observes TOLD – sing a recycling song; ask recycling trivia questions. Walk them through the process, tell them your goals, ask them for their thoughts, invite them to join the initiative, and/or offer rewards and incentives.

Set a rain/snow date and/or location.

Wear old clothes, high boots, and/or jump suits.



Best Practices - Continued

Call the media. If reporters or photographers attend the audit, get their contact information so you can call them with the results so that they may include them in the story.

Involve as many classes as possible: Art, science, economics, media productions, sociology, and many more disciplines can be connected with waste themes. Ask the principal to make it mandatory for teachers to bring their classes out to the audit to at least witness, and better yet, participate in the waste separation.



Best Practices - Continued

Design and maintain clear, legible data sheets and collection processes. Make sure data collection is thoughtful and organized so you don't mess it up. Make data collection sheet representative of the categories you plan to examine. Have one or more designated data recorders so that nothing is lost or overlooked.

Label bags: After a bag is weighed and the volume is estimated, label the bag with the data and set aside. This will make it clear to volunteers which bags/data has been recorded.

Consider covering the audit site: Ask the athletic department if you can borrow a canopy in the event of sun/rain/snow. The canopy also gives the audit location some structure and increases visibility. Be sure to anchor the canopy securely to the ground in case of wind. Ask the maintenance staff for assistance.

Trash On the Lawn Day in Action



Results and Action Plan Implementation

- What do the results tell about the school's waste habits?
- Meet with planning group after event to talk about results and next steps.
- Use results as a springboard for further action.

Options for Schools

- Hire NRRA



- Rent a Kit



Example only

The TOLD Kit

- Large, heavy-duty black bags for trash cans
- Large, medium weight white or clear bags for recycling cans
- Glad FlexForce bags for buckets (prevent leaking)
- Scales
- Clipboard & pen
- Calculator
- Field data sheet
- First aid kit
- Signs and clamps or clothespins to attach them to the bins:
 - Trash (2)
 - Plastic (2)
 - Paper/Cardboard (2)
 - Aluminum/Steel/Metal
 - Compost/Food Waste (2)
 - Glass/Electronics (set aside-adult handling)
 - Optional Signs (1 each): Special collections for Terracycle, markers/highlighters for Crayola, Milk Cartons and Juice Boxes, straws (to focus on eliminating), and blanks.

- Manual Included
- Shipped to your school

School Provides

- Trash Cans (6-8)
- 5 gal. buckets (1-2)
- Tarps (1 large or 2 medium)
- Table/Chairs (1 each, more as needed)
- Aprons for special helpers, recycling club, et.
- Paper towels
- Clorox wipes
- Hand sanitizer
- Gloves
- Mop/Hose/All-purpose cleaner for tarps

TOLD in Action in Goffstown, NH



<https://www.youtube.com/watch?v=m7n7OCi7JWg&feature=youtu.be>



Thank you For Recycling

Northeast Resource Recovery Association

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STAY CONNECTED



This concludes our training module : *Trash On the Lawn Day*_{TM}

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