



Northeast Resource Recovery Association

"Partnering to make recycling strong through economic and environmentally sound solutions"

July 18, 2022

Dear Thornton Representatives,

Thank you for participating in the SWAT (Solid Waste Advisory Team) Visit at the Thornton Recycling Facility on Friday, June 3. This visit was conducted under NRRA's Recycling with Results grant, which is supported by the Rural Utilities Service, United States Department of Agriculture (USDA). To learn more about this grant, see <https://www.nrrarecycles.org/news/press-release-nrra-begins-recycling-results-grant-project>.

Joining us were:

SWAT Volunteers: Steve Bean, Littleton, NH; Craig Moore, Ashland, NH & Varick Proper, Warner, NH

NRRA Staff: Heather Herring, Member Services Representative; Bonnie Bethune, Sr. Member Services Representative

Transfer Station Staff: Zach Simon, Acting Manager

Town Official(s): Roy Sabourn, Selectman; Debra Shepard, Town Administrator, was communicated with in advance but unable to attend this visit.

The SWAT Volunteers and NRRA Staff first met with the Transfer Station Staff, then the Town Official to discuss the below priority Areas for Improvement identified in advance of the visit. The SWAT Volunteers and NRRA Staff have prepared the following recommendations for consideration by the Transfer Station Staff and Town Officials. If you would like to have NRRA Staff discuss these results with you, we are happy to schedule a call or meeting to do so.

Priority Areas for Improvement:

1. How can Thornton improve traffic flow?
2. How can Thornton increase their recycling rate?
3. How can Thornton improve facility safety for operators and residents?
4. What economical storage would work best for Thornton?

For each of the Priority Areas for Improvement, the SWAT Volunteers and NRRA Staff provided short term and long term recommendations for Thornton to consider implementing.

Priority #1: How can Thornton improve traffic flow?

There is currently a dirt drive with residents crossing paths to get to recycling, MSW (municipal solid waste), C&D (construction & demolition debris) and scrap metal areas.

Short Term Solutions: (Option 1 – see map below)

- 1) Site is not paved but lines can be painted on dirt (lasts up to a month) to indicate traffic flow; paint lines with line sprayer to left (closest to landfill) for an express lane for MSW only
- 2) Move small gray building on left of entrance
- 3) Cut trees to enlarge road entrance
- 4) If 10' more space available on landfill side, could enlarge roadway to the left

- 5) Larger entrance would give more room for vehicle traffic/increase visibility/allow tractor trailers to come in through the entrance (instead of exit as they do now)
- 6) Relocate storage containers for increased traffic flow



Short Term Solutions: (Option 2 – see map below)

1. Drive-in parking spots for recyclables and MSW
2. Residents pull in, deposit items, back out and exit or move forward to next location
3. Alternative to triple parking in lanes where resident crossover is required



Long Term Solutions:

- 1) Pave site to allow for permanent lines, dust control, easier maintenance in winter (see Bristol's arrow's/lines below)



- 2) Provide second means of access to MSW Hopper (one currently on right); second on left to decrease congestion at MSW hopper



Priority #2: How can Thornton increase their recycling rate?

Short Term Solutions:

- 1) Enforcement of Rules
 - Continued enforcement of mandatory recycling
 - Continued enforcement of residential stickers
- 2) Signage
 - Sandwich Boards – with Recycling Factoids: continue “Trash Talk” – Free/NH The Beautiful
 - SIGNAGE Year-to-Date Revenue Sign - Free/NH The Beautiful
- 3) Informational handouts
 - Continued updates on website
- 4) Security Cameras - to help enforce mandatory recycling, install security cameras at the following locations
 - Recycling Building Overhang Post – License plate level
 - Office by MSW Hopper
 - On lower level by storage building
 - Scrap metal area – so can monitor from office
 - C&D area – so can monitor from office
 - w/ signs that state “Resident Stickers Required” , “Mandatory Recycling” and or “Security Cameras in Use”
 - Est. costs \$180 - \$200 for 5 cameras; Craig from Ashland said cameras dropped MSW tonnage significantly

Long Term Solutions:

1. Clear MSW Bag System
2. PAYT (Pay As You Throw) unit based system
 - Using bags, punch cards or stickers for bags

Priority #3: How can Thornton improve facility safety for operators and residents?

Short Term Solutions:

- 1) MSW Hopper being replaced with safer/higher sides and larger capacity for bucket loader to dump material in (in progress)
- 2) Rail systems: at drop sites for scrap metal, C&D to provide safety and convenience to residents
- 3) Traffic lines: would add to traffic and pedestrian safety (with so much mixing of people)
- 4) Consider new parking pattern next to MSW hopper
 - Residents could park perpendicular to hopper/trailer than back out
 - Providing a handicap/reserved spot?
 - Cement bumpers with ledge pack walkway?
 - Consider bringing containers up to a higher level so sides of container provide safer barrier



- 5) C&D / scrap metal densification option
 - collect in bunker like Ashland; crush/run over and then load in to open top rolloff container

Long Term Solutions:

- 1) Stationary or swinging gates by C&D & Scrap Metal containers OR bring containers up to a higher level so sides of container provide safer barrier (see Grainger's speed rail for gates/barriers)

Priority #4: What economical storage would work best for Thornton?

Currently only cardboard is undercover, storage needed for aluminum can and plastic bales and for future mixed paper recycling.

Short Term Solutions:

- 1) Quonset Hut for bale storage - see Ashland experience below
 - Calhoun Structure
 - 25-year warranty; made for New England weather
 - Paved floor by town
 - Large interlocking blocks as sides (2 -4 high depending on height reach of equipment)
 - Approx. 60' x 30'
 - Approx. cost \$30K



Long Term Solutions:

- 1) Pole Barn Structure for Pre-Storage of Plastics, Steel Cans, Aluminum Cans (4 bays suggested) – see Ashland’s pole barn below
 - w/ Concrete Slab
 - Access in front by public with 2 stage separation
 - Moveable trays that residents put material into; staff inspects and puts material in bunker
 - Moveable trays so can set aside and push material up to make more space
 - Access in back for loader to come in with bucket to bring material to baler (using a chute system)



- 2) Use current Recycling Building for storage of equipment (loader, skid steer, etc.) plus office space/facilities
- 3) NEW Recycling Building with Horizontal Baler (see Bristol NH model below)





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Additional Resources:

The following are resources available to the Thornton/Campton/Ellsworth for education and capital improvements at the Thornton Transfer Station:

- 1) NHTB – Free Signs <https://nhthebeautiful.org/facility-signs/>
- 2) NHTB – Free Sandwich Boards <https://nhthebeautiful.org/a-frame-sandwich-board-facility-sign-program/>
- 3) NHTB – Equipment Grants <https://nhthebeautiful.org/municipal-recycling-and-storage-equipment-grants/>
- 4) USDA – Community Facilities Direct Loan & Grant - Thornton NH eligible for 35% for Community Facilities Grant <https://www.nrrarecycles.org/news/january-mom-meeting-features-usda-funding-recycling-facilities>
- 5) EPA Grants (Pending Fall 2022)