Processed Glass Aggregate Survey Summary 2020

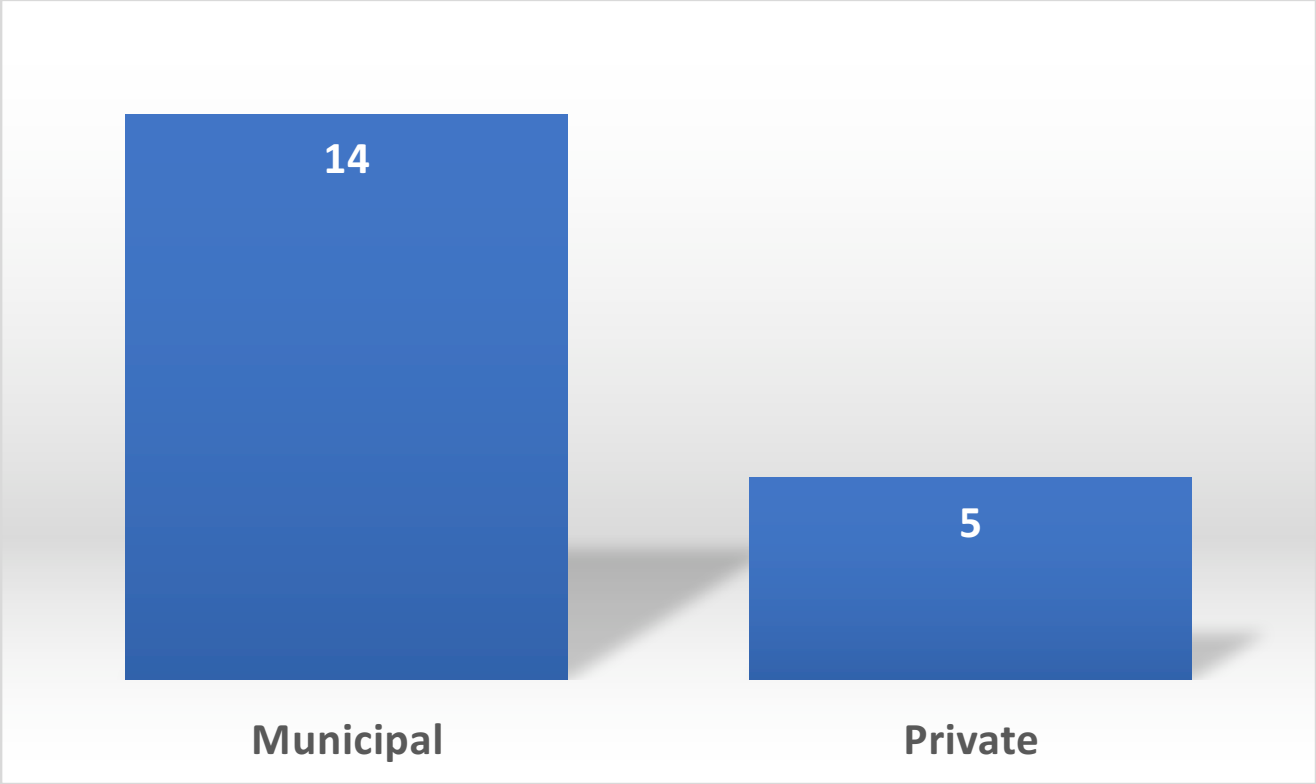
Northeast Resource Recovery Association
2101 Dover Road, Epsom, New Hampshire 03234
603.736.4401 | www.nrrarecycles.org | /NRRArecycles

Executive Summary

In June of 2020, the Northeast Resource Recovery Association, a recycling nonprofit, launched a survey to collect examples of processed glass aggregate (PGA) use throughout the Northeast. The Survey garnered a total of 18 participants from Connecticut, Massachusetts, New Hampshire, New Jersey and Vermont. Among the survey respondents, most indicated they used PGA for municipal projects with few having used it in private projects. There were no examples of PGA use in a state project. Bedding material for pipes, walls or foundations was the most common application of PGA among survey respondents. The year in which the PGA was used ranged from 1978 to the present and most respondents indicated they were very satisfied with the result after using the PGA.

Contact information for survey respondents can be found at the end of this report. For more information about this survey report, please contact Reagan Bissonnette, Executive Director of the Northeast Resource Recovery Association, at rbissonnette@nrrarecycles.org or (603) 736-4401 x116. For more information about the Northeast Resource Recovery Association's PGA program, visit www.nrrarecycles.org/glass-recycling.

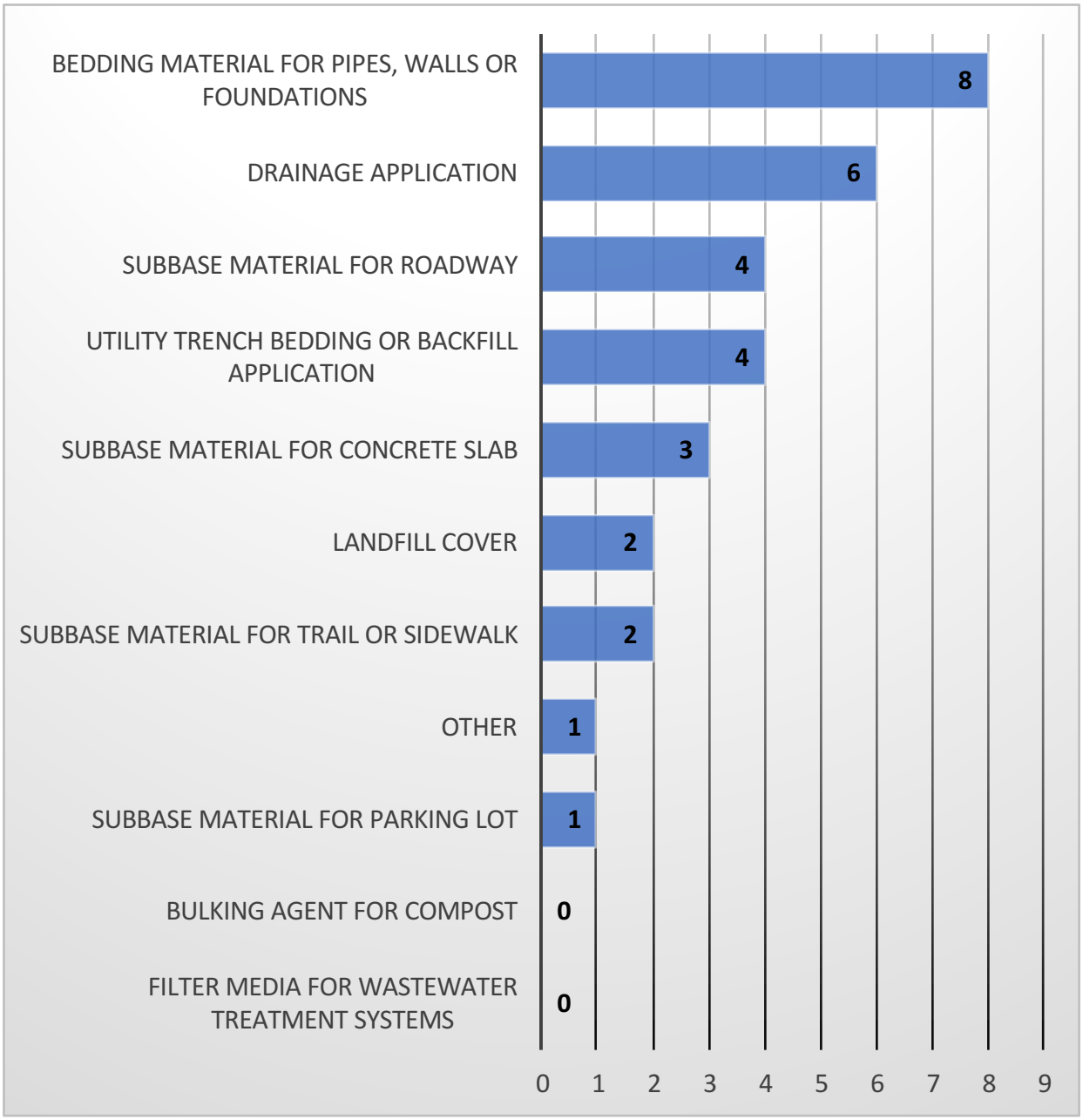
Q1. Was the processed glass aggregate used for a municipal project, a state project or for private use? (Respondents could choose more than one answer)



Fourteen respondents indicated that the processed glass aggregate was used for a municipal project, while six chose private project. There were no responses indicating the PGA was used for a state project.

NRRA
Northeast Resource Recovery Association

Q2. What was the application of the processed glass aggregate? (check all that apply)



Most survey respondents indicated that the PGA was used as bedding material for pipes, walls or foundations followed by drainage applications and subbase material for roadway and concrete slab. One “other” response noted that the PGA was used to create a PGA polymer sewer pipe.

Q3. In which town/city and state was the processed glass aggregate used?

Town/city	State
Avenel	NJ
Brattleboro & Keene area	VT & NH
Croyden	NH
Enfield	CT
Enfield	NH
Hanover	NH
Lebanon	NH
Lee	NH
Lenox	MA
Lisbon	NH
Littleton	NH
Loudon	NH
Meredith	NH
Moultonborough	NH
New London	NH
Newark	NJ
Springfield VT, Brattleboro VT, New London NH	VT & NH

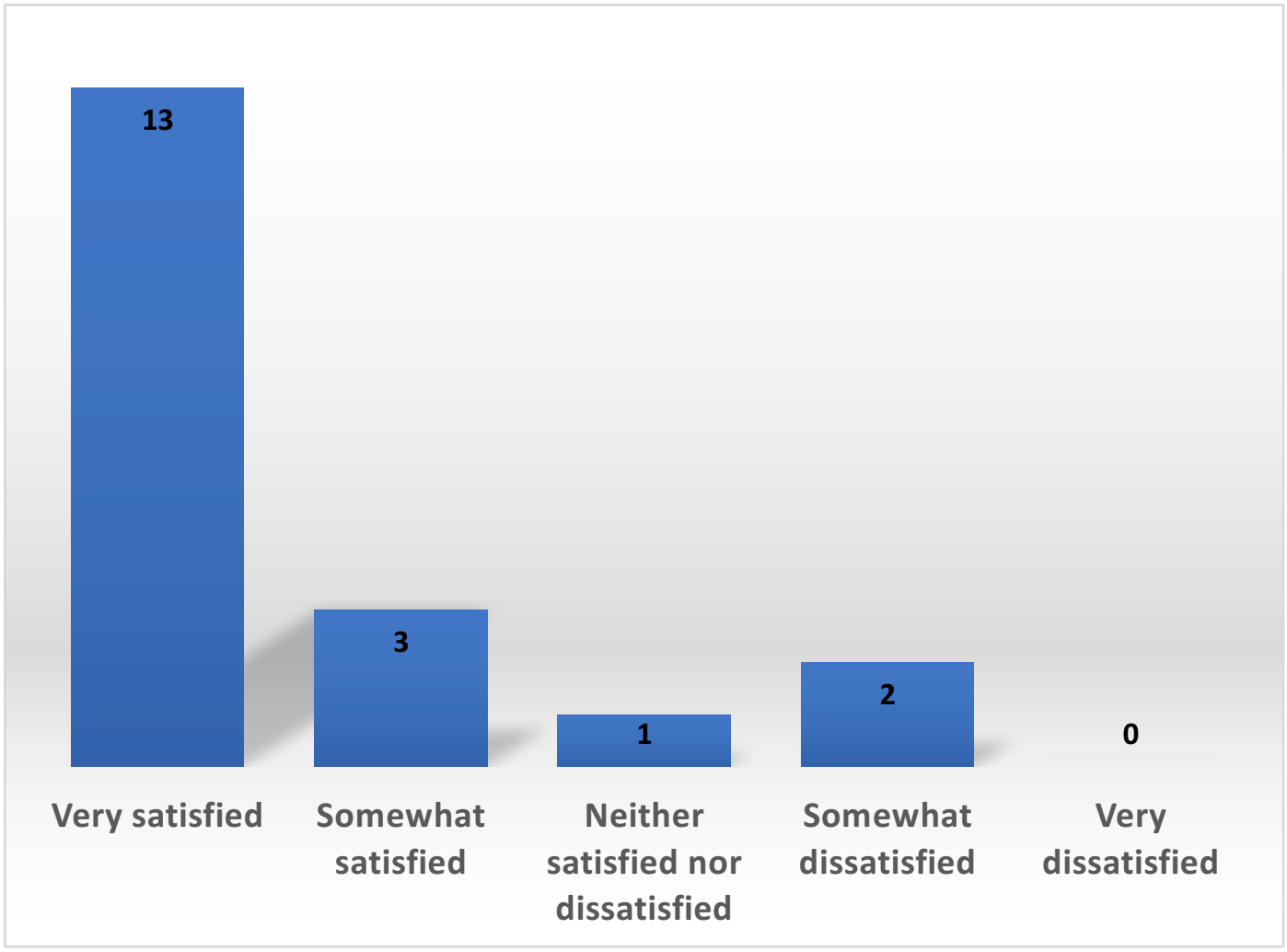
NRRA
Northeast Resource Recovery Association

Q4. In what year was the processed glass aggregate used?

Year material was used (individual responses)
1978
1992, 1998, 2017, 2018
1997 - 2018
1999 - 2018
2000 - 2016
2002 - 2011
2003
2005
2005 - 2020
2009 - 2015
2018
2019
2019
2020
Ongoing

NRRA
Northeast Resource Recovery Association

Q5. How satisfied were you with the result after using this material?



Most respondents indicated they were very satisfied with the result after using PGA, noting that the physical properties of the material made it easily compactible. Those who chose somewhat satisfied and somewhat dissatisfied commented that the glass was not crushed properly and therefore posed a safety risk to workers and property owners. Odor of the PGA was also noted as an issue.

NRRA
Northeast Resource Recovery Association

Q6. Survey Comments

It was a great use for the recycled materials, and bedding drainage pipes worked well with no issues.
The crushed glass was a replacement for crushed stone on the bedding of culvert pipes we installed.
The town used the glass to cut the cost of gravel by mixing at 50% glass and was used to bed culverts and was added to the road while it was being ground. The glass saved us money and had a great compaction factor being mixed with the crushed gravel.
This was a project with Brookhaven National Labs and Teletype National. It was a PGA polymer pipe, that was placed in an industrial area of Newark.
The PGA was used under a sidewalk and has held up very well with no frost movement.
Good material to use, is not frost susceptible, and can be compacted easily.
The Parsons Marsh Trail is a fully accessible trail managed by the Berkshire Natural Resources Council. The PGA was used as a subbase for the trailhead info kiosk, as a subbase for a park bench, and as a subbase for a fully accessible picnic table platform.
PGA is a terrific material and should be used in place of virgin materials.
The PGA seems to hold up very well with frost conditions.
Creating a uniform product is critical. Odors of the glass can be a problem.
The ground glass that was used on the project had a significant number of large pieces that posed a safety issue to the workers.
Great product to work with, works great.
When there were site failures, the glass aggregate caused property damage and created safety concerns to private property owners.
It is great for some uses but not for others. For example, under concrete slabs is great but around high pressure main water lines it is bad if not used properly.

Contact Information

The following survey respondents consented to including their contact information in this report. Please feel free to contact these individuals to learn more about their experience using PGA.

Name/Company	Address	Phone	Email
Gregg Wall, Fast Track Materials LLC	94 Oweno Road, Mahwah NJ 07430	(201) 956-4544	Gregg@fasttrackmaterials.com
Scott Kinmond, Town of New Durham	PO. Box 207, New Durham NH 03855	(603) 859-2091	skinmond@newdurham.us
Russ Pearl, Loudon Highway Dept.	55 South Village Rd. Suite 7, Loudon NH 03307	(603) 892-4477	roadagent@loudonnh.org
Bob Spencer, Windham Solid Waste Management District	327 Old Ferry Rd. Brattleboro, VT 05301	NA	director@windhamsolidwaste.org
Chris Roberts, Town of Croyden	Croyden, NH 03773	(603) 863-4849	croydonhighway@gmail.com
Gary Liss	4395 Gold Trail Way, Loomis CA 95650	(916) 652-7850	gary@garyliss.com
Caleb Rick, EcoGlobal	PO. Box 160, Chelsea VT 05038	(802) 777-8500	caleb@ekomats.com
Robert Harrington, Town of New London	375 Main Street, New London NH 03257	(603) 526-6337	nlhd@tds.net
Marc Morgan, City of Lebanon	193 Dartmouth College Hwy, Lebanon NH 03766	(603) 442-6210	morgan@lebanonnh.gov
Geoffrey McAlmond, Town of Longmeadow CT DPW	31 Pondside Rd, Longmeadow MA 01106	(413) 567-3400	gmcalmond@longmeadow.org
Matthew Priestly, Alva Waste Services	1050 Charlestown Rd, Springfield VT 05156	(802) 291-4807	Mdp_alva@yahoo.com
Jim Taylor, Town of Enfield DPW	PO. Box 373 Enfield, NH 03748	(603) 632-4605	jtaylor@enfield.nh.us
Steve Bullek, Town of Lee	4 Recycling Center Road Lee NH 03861	(603) 738-5963	sbullek@leenh.org
Brian Patnoe, Town of Littleton	1213 Mt. Eustis Rd, Littleton, NH 03561	(603) 444-1447	bpatnoe@townoflittleton.org