

LINAP Fertilizer Management Workgroup Questionnaire Response Summary

Nutrient Recycling

The LINAP Scope identified a number of nutrient recycling activities as topics to explore for reducing nutrient loads to the waters of Long Island.

Summary of Findings

- All respondents believe composting is an important nutrient management tool.
- The following materials were ranked in order of the most preferred (1) to least preferred (5) focus of composting efforts for nutrient management:
 - 1. Grass clippings
 - 2. Leaf litter
 - 3. Agriculture waste
 - 4. Non-meat food waste
 - 5. Wood chips/saw dust
- The majority of the group believes that the development of alternative fertilizers derived from sanitary waste is an important nutrient management tool.
- The following alternative fertilizer materials were ranked in order of most preferred (1) to least preferred (5):
 - 1. Treated wastewater
 - 2. Wastewater bio-solids
 - 3. Bio-harvested products
 - 4. Separated urine
 - 5. Composting toilets
- The barriers to increasing composting and or alternative fertilizer efforts were ranked in order of most important (1) to least important (6):

- 1. Cost of conventional fertilizers
- 2. Infrastructure
- 3. Markets
- 4. Public acceptance5. Composition competency6. Existing regulations

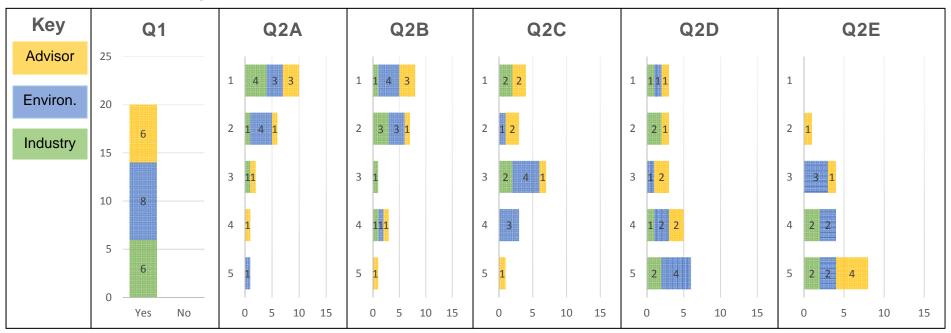
Nutrient Recycling Questionnaire Answers & Analysis

Questions 1 & 2: Compost

Affiliation	Q1 (Do you believe composting is an important nutrient management tool?)	Q2 (Rank [from 1-5 with 1 being the most important] the following materials in order of preference to be the focus of composting efforts for nutrient management?)						
Aimation		A. Grass Clippings	B. Leaf Litter	C. Agricultural Waste	D. Non-Meat Food Waste	E. Wood Chips / Saw Dust		
Advisor 1	Yes	2	1	3	4	5		
Advisor 2	No	4	1	2	3	5		
Advisor 3	Yes	3	4	1	2	5		
Advisor 4	Yes	1	5	2	3	5		
Advisor 5	Yes	1	2	5	4	3		
Advisor 6	Yes	1	1	1	1	2		
Environ. 1	Yes	2	1	4	3	5		
Environ. 2	Yes	2	1	4	5	3		
Environ. 3	Yes	1	2	4	5	3		
Environ. 4	Yes	2	1	3	4	5		
Environ. 5	Yes	1	2	3	5	4		
Environ. 6	Yes	5	4	2	1	3		
Environ. 7	Yes	1	2	3	5	4		
Environ. 8	Yes	2	1	3	4	5		

Affiliation	Q1 cont'd (composting important nutrient management tool)	Q2a cont'd (grass clippings important)	Q2b cont'd (leaf litter important)	Q2c cont'd (agricultural waste important)	Q2d cont'd (non-meat food waste important)	Q2e cont'd (wood chips / saw dust important)
Industry 1	Yes	1	1		1	
Industry 2	Yes	1	2	3	5	4
Industry 3	Yes	1	2	3	5	4
Industry 4	Yes	3	4	1	2	5
Industry 5	Yes	1	2			
Industry 6	Yes	2	3	1	4	5

Questions 1 & 2: Analysis

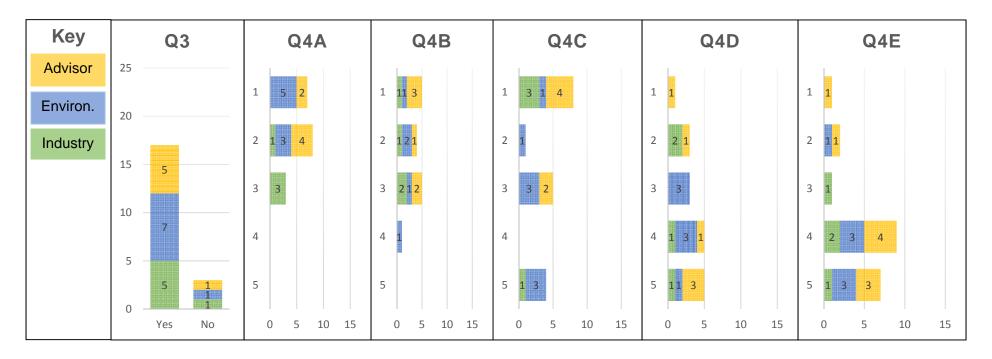


Questions 4 & 5: Alternative fertilizer materials

Affiliation	Q3 (Do you believe the development of alternative fertilizers derived from sanitary waste is an important nutrient management tool?)	Q4: Rank (from 1-5 with 1 being the most important) the following materials in order of preference to be the focus of efforts to develop as alternative fertilizer material for nutrient management.)						
		A. Treated wastewater effluent	B. Wastewater bio-solids	C. Bio-harvested products	D. Separated urine	E. Composting toilets		
Advisor 1	Yes	2	3	1	4	5		
Advisor 2	No	1	1	1	1	1		
Advisor 3	Yes	2	3	1	4	5		
Advisor 4	Yes	1	2	3	4	5		
Advisor 5	Yes	2	1	3	5	4		
Advisor 6	Yes	2	1	1	2	2		
Environ. 1	Yes	2	1	3	4	5		
Environ. 2	Yes	2	1	3	5	4		
Environ. 3	Yes	1	2	5	3	4		
Environ. 4	Yes	1	4	2	3	5		
Environ. 5	No	1	3	5	4	2		
Environ. 6	Yes	1		1				
Environ. 7	Yes	2	1	5	3	4		
Environ. 8	Yes	1	2	3	4	5		
Industry 1	Yes	3	3	1	2	3		
Industry 2	Yes	3	1	5	2	4		

Affiliation	Q3 cont'd (alternative sources important)	Q4a cont'd (treated wastewater effluent)	Q4b cont'd (wastewater bio- solids)	Q4c cont'd (bio- harvested products)	Q4d cont'd (separated urine)	Q4e cont'd (composting toilets)
Industry 3	No					
Industry 4	Yes	2	3	1	4	5
Industry 5	Yes					
Industry 6	Yes	3	2	1	5	4

Questions 3 & 4: Analysis



Question 5: Barriers to nutrient recycling

	Q5 (Rank [from 1-6 with 1 being the most important] the importance of the following barriers to increasing composting and/or alternative fertilizer efforts.)						
Affiliation	A. Cost vs. conventional fertilizers	B. Infrastructure	C. Markets	D. Public acceptance	E. Composition and consistency	F. Existing regulations	
Advisor 1	1	5	3	6	2	4	
Advisor 2	3	1	5	2	4	6	
Advisor 3	3	6	1	4	2	5	
Advisor 4	2	1	2	2	6	3	
Advisor 5	2	3	1	5	4	6	
Advisor 6	2	2	2	2	2	2	
Environ. 1	3	2	6	4	5	1	
Environ. 2	1	2	3	6	5	4	
Environ. 3	4	3	1	5	6	2	
Environ. 4	2			1	3		
Environ. 5	3	4	2	1	5	6	
Environ. 6	6	1	3	5	2	4	
Environ. 7	1	2	5	6	3	4	
Environ. 8	2	5	4	1	6	3	
Industry 1	2			2	1		
Industry 2	2	2	4	1	1	1	
Industry 3	4	2	3	1	5	6	
Industry 4	2	1	6	3	4	5	

Affiliation	Q5a cont'd (cost)	Q5b cont'd (infrastructure)	Q5c cont'd (markets)	Q5d cont'd (public acceptance)	Q5e cont'd (composition & consistency)	Q5f cont'd (regulations)
Industry 5	1	5	4	2	3	6
Industry 6	1	3	6	5	2	4

Question 5: Analysis

