This document links with
" St Helena Cost Benefit Analysis,
Waste Management
Final Report"
https://hub.jncc.gov.uk/assets/0cf5c4ed-bdbd-44d1-8309-5c77b205ad86

BASE CASE RAW DATA

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x																																									
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x																																									
Indirect benefits construction																																									
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Direct benefits Maintenance																																									
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x																																									
Indirect benefits Maintenance																																									
x																																									
x																																									
x																																									
Direct benefits security and reliability of option																																									
x																																									
Indirect benefits of security and reliability of option during drought conditions																																									
Water use and quality monitoring information for operations and planning																																									
Contribution to overall system efficiency																																									
Direct benefits of construction and operational impacts																																									
x																																									
Indirect benefits of construction and operational impacts																																									
Public relations/community relations issues																																									
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
HPLS redevelopment						150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000																										
Indirect costs construction																																									
x																																									
x																																									
x																																									
Direct costs Maintenance																																									
Labour																																									
Inputs Materials for operation																																									
Replacement of parts																																									
Disposal of residues/wastes from operations																																									
Decommissioning																																									
x																																									
x																																									
x																																									
Direct costs security and reliability of option during drought conditions																																									
Time from construction to problem solution																																									
x																																									
Direct costs of construction and operational impacts																																									
x																																									
x																																									
Indirect costs of construction and operational impacts																																									
Visual disturbance																																									
Noise																																									
Site management																																									
Habitat impacts (eg wire bird)																																									
Loss of ag land (cultural issues)																																									
Loss of ag land (food supply)																																									
Impacts on property prices																																									
Increase in carbon (soil/atmospheric)?																																									
Public relations/community relations issues																																									
Total	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	0	0	0	0	0	-150,000	-150,000	-150,000	-150,000	-150,000	-150,000	-150,000	-150,000	-150,000	-150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total benefits	0
Total costs	1,500,000

BASE CASE 7% 0.07

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
HPLS redevelopment	0	0	0	0	0	106,948	99,951	93,412	87,301	81,590	76,252	71,264	66,602	62,245	58,173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	106,948	99,951	93,412	87,301	81,590	76,252	71,264	66,602	62,245	58,173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	0	0	0	0	0	-106,948	-99,951	-93,412	-87,301	-81,590	-76,252	-71,264	-66,602	-62,245	-58,173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	803,739

BASE CASE 10% 0.10

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
Planning and engineering designs and approvals	0	0	0	0	0	93,138	84,671	76,974	69,976	63,615	57,831	52,574	47,795	43,450	39,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	93,138	84,671	76,974	69,976	63,615	57,831	52,574	47,795	43,450	39,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	0	0	0	0	0	-93,138	-84,671	-76,974	-69,976	-63,615	-57,831	-52,574	-47,795	-43,450	-39,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	629,523

BASE CASE 4% 0.04

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
HPLS redevelopment	0	0	0	0	0	123,289	118,547	113,988	109,604	105,388	101,335	97,437	93,690	90,086	86,621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	123,289	118,547	113,988	109,604	105,388	101,335	97,437	93,690	90,086	86,621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	0	0	0	0	0	-123,289	-118,547	-113,988	-109,604	-105,388	-101,335	-97,437	-93,690	-90,086	-86,621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	1,039,984

Horse Point Landfill RAW DATA

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
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Indirect benefits construction																																									
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Direct benefits Maintenance																																									
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Indirect benefits Maintenance																																									
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Direct benefits security and reliability of option																																									
x																																									
Indirect benefits of security and reliability of option during drought conditions																																									
Water use and quality monitoring information for operations and planning																																									
Contribution to overall system efficiency																																									
Direct benefits of construction and operational impacts																																									
x																																									
Indirect benefits of construction and operational impacts																																									
Public relations/community relations issues																																									
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
Planning and engineering designs and approvals	114,000																																								
Site preparation	741,731																																								
Access roads	330,000																																								
Buildings and facilities	655,193																																								
Land acquisition (market price reflects opp cost)/siting	679,250																																								
Indirect costs construction																																									
x																																									
x																																									
x																																									
Direct costs Maintenance																																									
x																																									
x																																									
x																																									
Direct costs security and reliability of option during drought conditions																																									
Time from construction to problem solution																																									
x																																									
Direct costs of construction and operational impacts																																									
x																																									
x																																									
Indirect costs of construction and operational impacts																																									
Visual disturbance																																									
Noise																																									
Site management																																									
Habitat impacts (eg wire bird)																																									
Loss of ag land (cultural issues)																																									
Loss of ag land (food supply)																																									
Impacts on property prices																																									
Increase in carbon (soil/atmospheric)?																																									
Public relations/community relations issues																																									
Total	2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	-2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	2,520,174

Horse Point Landfill 7% 0.07

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
Water use and quality monitoring information for operations and planning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to overall system efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
Planning and engineering designs and approvals	114,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site preparation	741,731	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Access roads	330,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buildings and facilities	655,193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land acquisition (market price reflects opp cost)/siting	679,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
Labour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inputs Materials for operation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement of parts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disposal of residues/wastes from operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decommissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
Time from construction to problem solution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
Visual disturbance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Habitat impacts (eg wire bird)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (cultural issues)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (food supply)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impacts on property prices	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase in carbon (soil/atmospheric)?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	-2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	2,520,174

Horse Point Landfill 10% 0.10

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
Water use and quality monitoring information for operations and planning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to overall system efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
Planning and engineering designs and approvals	114,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site preparation	741,731	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Access roads	330,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buildings and facilities	655,193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land acquisition (market price reflects opp cost)/siting	679,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
Labour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inputs Materials for operation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement of parts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disposal of residues/wastes from operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decommissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
Time from construction to problem solution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
Visual disturbance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Habitat impacts (eg wire bird)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (cultural issues)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (food supply)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impacts on property prices	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase in carbon (soil/atmospheric)?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	-2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	2,520,174

Horse Point Landfill 4% 0.04

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits Construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits Maintenance																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits security and reliability of option																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of security and reliability of option during drought conditions																																									
Water use and quality monitoring information for operations and planning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to overall system efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct benefits of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect benefits of construction and operational impacts																																									
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs Construction																																									
Planning and engineering designs and approvals	114,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site preparation	741,731	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Access roads	330,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buildings and facilities	655,193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land acquisition (market price reflects opp cost)/siting	679,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs construction																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs Maintenance																																									
Labour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inputs Materials for operation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement of parts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disposal of residues/wastes from operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decommissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs security and reliability of option during drought conditions																																									
Time from construction to problem solution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct costs of construction and operational impacts																																									
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indirect costs of construction and operational impacts																																									
Visual disturbance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Habitat impacts (eg wire bird)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (cultural issues)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of ag land (food supply)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impacts on property prices	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase in carbon (soil/atmospheric)?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public relations/community relations issues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	-2,520,174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV total benefits	0
NPV total costs	2,520,174

Incinerator RAW DATA

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Indirect benefits																																									
Landfill void space value																																									
Paper		82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82															
Card		109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109															
Rigid plastic		871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871															
Green waste		208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208															
Total	0	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs																																									
Used incinerator	170,000																																								
New incinerator	327,000																																								
IED compliance	200,000																																								
Energy supply (diesel costs)		24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558															
Total																																									
Used incinerator	370,000	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	527,000	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	24,558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total benefits	31,750
Total costs (used)	983,950
Total costs (new)	1,140,950
B/C ratio (used)	0.03
B/C ratio (new)	0.03

Incinerator 7% 0.07

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Indirect benefits																																									
Landfill void space value																																									
Paper	0	77	72	67	63	58	55	51	48	45	42	39	36	34	32	30	28	26	24	23	21	20	19	17	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Card	0	102	95	89	83	78	73	68	63	59	55	52	48	45	42	40	37	35	32	30	28	26	25	23	21	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rigid plastic	0	814	761	711	664	621	580	542	507	474	443	414	387	361	338	316	295	276	258	241	225	210	197	184	172	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green waste	0	194	182	170	159	148	139	130	121	113	106	99	92	86	81	75	70	66	62	58	54	50	47	44	41	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1,187	1,109	1,037	969	905	846	791	739	691	646	603	564	527	493	460	430	402	376	351	328	307	287	268	250	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs																																									
Used incinerator	170,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	327,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IED Compliance	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy supply (diesel costs)	0	22,951	21,450	20,047	18,735	17,510	16,364	15,293	14,293	13,358	12,484	11,667	10,904	10,191	9,524	8,901	8,319	7,774	7,266	6,790	6,346	5,931	5,543	5,180	4,842	4,525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																																									
Used incinerator	370,000	22,951	21,450	20,047	18,735	17,510	16,364	15,293	14,293	13,358	12,484	11,667	10,904	10,191	9,524	8,901	8,319	7,774	7,266	6,790	6,346	5,931	5,543	5,180	4,842	4,525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	527,000	22,951	21,450	20,047	18,735	17,510	16,364	15,293	14,293	13,358	12,484	11,667	10,904	10,191	9,524	8,901	8,319	7,774	7,266	6,790	6,346	5,931	5,543	5,180	4,842	4,525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV benefits	14,800
NPV costs (used)	656,189
NPV costs (new)	813,189
B/C ratio (used)	0.02
B/C ratio (new)	0.02

Incinerator 10% 0.1

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Indirect benefits																																									
Landfill void space value																																									
Paper	0	75	68	62	56	51	46	42	38	35	32	29	26	24	22	20	18	16	15	13	12	11	10	9	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Card	0	99	90	82	74	68	62	56	51	46	42	38	35	32	29	26	24	22	20	18	16	15	13	12	11	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rigid plastic	0	792	720	654	595	541	492	447	406	369	336	305	278	252	229	209	190	172	157	142	129	118	107	97	88	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green waste	0	189	172	156	142	129	117	107	97	88	80	73	66	60	55	50	45	41	37	34	31	28	26	23	21	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1,155	1,050	954	867	789	717	652	592	539	490	445	405	368	334	304	276	251	228	208	189	172	156	142	129	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs																																									
Used incinerator	170,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	327,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IED Compliance	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy supply (diesel costs)	0	22,325	20,296	18,451	16,773	15,249	13,862	12,602	11,456	10,415	9,468	8,607	7,825	7,114	6,467	5,879	5,345	4,859	4,417	4,015	3,650	3,319	3,017	2,743	2,493	2,267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																																									
Used incinerator	370,000	22,325	20,296	18,451	16,773	15,249	13,862	12,602	11,456	10,415	9,468	8,607	7,825	7,114	6,467	5,879	5,345	4,859	4,417	4,015	3,650	3,319	3,017	2,743	2,493	2,267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	527,000	22,325	20,296	18,451	16,773	15,249	13,862	12,602	11,456	10,415	9,468	8,607	7,825	7,114	6,467	5,879	5,345	4,859	4,417	4,015	3,650	3,319	3,017	2,743	2,493	2,267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV benefits	11,528
NPV costs (used)	592,914
NPV costs (new)	749,914
B/C ratio (used)	0.02
B/C ratio (new)	0.02

Incinerator 4% 0.04

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Indirect benefits																																									
Landfill void space value																																									
Paper	0	79	76	73	70	67	65	62	60	58	55	53	51	49	47	46	44	42	40	39	37	36	35	33	32	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Card	0	105	101	97	93	90	86	83	80	77	74	71	68	65	63	61	58	56	54	52	50	48	46	44	43	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rigid plastic	0	838	805	774	745	716	688	662	636	612	588	566	544	523	503	484	465	447	430	413	398	382	368	353	340	327	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green waste	0	200	192	185	178	171	164	158	152	146	141	135	130	125	120	115	111	107	103	99	95	91	88	84	81	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1,221	1,174	1,129	1,086	1,044	1,004	965	928	892	858	825	793	763	733	705	678	652	627	603	580	557	536	515	495	476	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs																																									
Used incinerator	170,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	327,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IED compliance	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy supply (diesel costs)	0	23,613	22,705	21,832	20,992	20,185	19,409	18,662	17,944	17,254	16,591	15,952	15,339	14,749	14,182	13,636	13,112	12,607	12,123	11,656	11,208	10,777	10,362	9,964	9,581	9,212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																																									
Used incinerator	370,000	23,613	22,705	21,832	20,992	20,185	19,409	18,662	17,944	17,254	16,591	15,952	15,339	14,749	14,182	13,636	13,112	12,607	12,123	11,656	11,208	10,777	10,362	9,964	9,581	9,212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New incinerator	527,000	23,613	22,705	21,832	20,992	20,185	19,409	18,662	17,944	17,254	16,591	15,952	15,339	14,749	14,182	13,636	13,112	12,607	12,123	11,656	11,208	10,777	10,362	9,964	9,581	9,212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NPV benefits	19,840
NPV costs (used)	753,647
NPV costs (new)	910,647
B/C ratio (used)	0.03
B/C ratio (new)	0.02

Reuse/composting/recycling RAW DATA

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits revenue from recycling/substitution																																									
Glass																																									
Cullet (subsitution)		3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060															
Sand (substitution)		2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870															
Cans/tins																																									
Steel (revenue)		4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316															
Aluminium (revenue)		33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420	33,420															
Paper/card																																									
Paper (revenue)		1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950															
Card (revenue)		2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460	2,460															
Plastic																																									
Rigid plastic: HDPE & PET (revenue)		2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415															
Green waste																																									
Compost (import cost saving)		2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270															
Indirect benefits																																									
Landfill void space value																																									
Glass		624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624															
Steel		1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207															
Aluminium		1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207	1,207															
Paper		82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82															
Card		109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109															
Rigid plastic		871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871															
Green waste		208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208															
Total																																									
Glass																																									
Cullet	0	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684	3,684															
Sand	0	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494	3,494															
Cans/tins	0	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060	50,060															
Paper/card	0	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324	12,324															
Plastic																																									
Baled	0	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286															
Green waste	0	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578	6,578															
Total benefits																																									
1. Lowest benefit: glass used for sand, plastic chipped and landfilled	0	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456	72,456															
2. Highest benefit: glass used for cullet, plastic baled and recycled	0	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932	75,932															

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs plant and machinery																																									
Glass																																									
Glass imploder (mean)	35,000																																								
Glassbusters	32,250																																								
Krystaline	55,960																																								
Cans/tins																																									
Steel/alu compactor/baler (vertical mean)	9,000																																								
Steel/alu compactor/baler (horizontal mean)	27,500																																								
Paper/card																																									
Compactor/baler (mean)	9,000																																								
Plastic																																									
Chipper (mean)	17,500																																								
Compactor/baler (mean)	9,000																																								
Green waste																																									
Biodigester (kitchen waste)	14,000																																								
Chipper (garden waste mean)	17,500																																								
Direct costs Maintenance																																									
Glass																																									
Glassbusters (blades)		800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800															
Glassbusters (motor)		30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30															
Glassbusters (conveyor mean)		160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160															
Green waste																																									
Hammers		270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270															
Transport																																									
All exported waste streams		33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125															
Excl. chipped plastic		26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581															
x																																									
Total																																									
Glass																																									
Glass imploder	35,000	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990															
Glassbusters	32,250	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990															
Krystaline	55,960	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990															
Cans/tins																																									
Low	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
High	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic																																									
Chipper	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Baler	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	31,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Transport (shipping)																																									
Inc plastic	0	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125	33,125															
Excl plastic	0	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581	26,581															
Total costs																																									
1. Lowest initial cost: Glassbusters, vertical can compactor, plastic baler	59,250	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115	34,115															
2. Highest initial cost: Krystaline, horizontal can compactor, plastic chipper	141,460	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571	27,571															
Cost-benefits																																									
1. Plastic baled	-59,250	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341	38,341															
2. Plastic chipped	-141,460	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885	44,885															

Net present value	
1. Plastic baled and recycled	899,283
2. Plastic chipped and landfilled	980,665

Benefit-cost ratio	
1. Plastic baled and recycled	2.08
2. Plastic chipped and landfilled	2.18

Reuse/composting/recycling RAW DATA 0.07

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits revenue from recycling/substitution																																									
Glass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cullet (subsitution)	0	2,860	2,673	2,498	2,334	2,182	2,039	1,906	1,781	1,664	1,556	1,454	1,359	1,270	1,187	1,109	1,037	969	905	846	791	739	691	645	603	564															
Sand (substitution)	0	2,682	2,507	2,343	2,190	2,046	1,912	1,787	1,670	1,561	1,459	1,364	1,274	1,191	1,113	1,040	972	909	849	794	742	693	648	605	566	529															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel (revenue)	0	4,034	3,770	3,523	3,293	3,077	2,876	2,688	2,512	2,348	2,194	2,051	1,916	1,791	1,674	1,564	1,462	1,366	1,277	1,193	1,115	1,042	974	910	851	795															
Aluminium (revenue)	0	31,234	29,190	27,281	25,496	23,828	22,269	20,812	19,451	18,178	16,989	15,878	14,839	13,868	12,961	12,113	11,321	10,580	9,888	9,241	8,636	8,071	7,543	7,050	6,589	6,158															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper (revenue)	0	1,822	1,703	1,592	1,488	1,390	1,299	1,214	1,135	1,061	991	926	866	809	756	707	661	617	577	539	504	471	440	411	384	359															
Card (revenue)	0	2,299	2,149	2,008	1,877	1,754	1,639	1,532	1,432	1,338	1,251	1,169	1,092	1,021	954	892	833	779	728	680	636	594	555	519	485	453															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Rigid plastic: HDPE & PET (revenue)	0	2,257	2,109	1,971	1,842	1,722	1,609	1,504	1,406	1,314	1,228	1,147	1,072	1,002	937	875	818	765	715	668	624	583	545	509	476	445															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compost (import cost saving)	0	2,121	1,983	1,853	1,732	1,618	1,513	1,414	1,321	1,235	1,154	1,078	1,008	942	880	823	769	719	672	628	587	548	512	479	448	418															
Indirect benefits																																									
Landfill void space value																																									
Glass	0	583	545	509	476	445	416	389	363	339	317	296	277	259	242	226	211	198	185	173	161	151	141	132	123	115															
Steel	0	1,128	1,054	985	921	861	804	752	702	657	614	573	536	501	468	437	409	382	357	334	312	292	272	255	238	222															
Aluminium	0	1,128	1,054	985	921	861	804	752	702	657	614	573	536	501	468	437	409	382	357	334	312	292	272	255	238	222															
Paper	0	77	72	67	63	58	55	51	48	45	42	39	36	34	32	30	28	26	24	23	21	20	19	17	16	15															
Card	0	102	95	89	83	78	73	68	63	59	55	52	48	45	42	40	37	35	32	30	28	26	25	23	21	20															
Rigid plastic	0	814	761	711	664	621	580	542	507	474	443	414	387	361	338	316	295	276	258	241	225	210	197	184	172	160															
Green waste	0	194	182	170	159	148	139	130	121	113	106	99	92	86	81	75	70	66	62	58	54	50	47	44	41	38															
Totals																																									
Glass																																									
Cullet	0	3,443	3,218	3,007	2,811	2,627	2,455	2,294	2,144	2,004	1,873	1,750	1,636	1,529	1,429	1,335	1,248	1,166	1,090	1,019	952	890	832	777	726	679															
Sand	0	3,265	3,052	2,852	2,666	2,491	2,328	2,176	2,034	1,901	1,776	1,660	1,551	1,450	1,355	1,266	1,184	1,106	1,034	966	903	844	789	737	689	644															
Cans/tins	0	46,785	43,724	40,864	38,191	35,692	33,357	31,175	29,135	27,229	25,448	23,783	22,227	20,773	19,414	18,144	16,957	15,848	14,811	13,842	12,936	12,090	11,299	10,560	9,869	9,224															
Paper/card	0	11,518	10,764	10,060	9,402	8,787	8,212	7,675	7,173	6,703	6,265	5,855	5,472	5,114	4,779	4,467	4,175	3,901	3,646	3,408	3,185	2,976	2,782	2,600	2,430	2,271															
Plastic																																									
Baled	0	8,210	7,673	7,171	6,702	6,264	5,854	5,471	5,113	4,778	4,466	4,174	3,901	3,645	3,407	3,184	2,976	2,781	2,599	2,429	2,270	2,122	1,983	1,853	1,732	1,619															
Green waste	0	6,148	5,745	5,370	5,018	4,690	4,383	4,096	3,828	3,578	3,344	3,125	2,921	2,730	2,551	2,384	2,228	2,082	1,946	1,819	1,700	1,589	1,485	1,388	1,297	1,212															
Total benefits																																									
1. Lowest benefit: glass used for sand, plastic chipped and landfilled	0	67,716	63,286	59,146	55,276	51,660	48,280	45,122	42,170	39,411	36,833	34,423	32,171	30,067	28,100	26,261	24,543	22,938	21,437	20,035	18,724	17,499	16,354	15,284	14,284	13,350															
2. Highest benefit: glass used for cullet, plastic baled and recycled	0	76,104	71,125	66,472	62,123	58,059	54,261	50,711	47,394	44,293	41,395	38,687	36,156	33,791	31,580	29,514	27,583	25,779	24,092	22,516	21,043	19,667	18,380	17,178	16,054	15,004															

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs plant and machinery																																									
Glass																																									
Glass imploder (mean)	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Glassbusters	32,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Krystaline	55,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (vertical mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (horizontal mean)	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Biodigester (kitchen waste)	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (garden waste mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Direct costs Maintenance																																									
Glass																																									
Glassbusters (blades)	0	748	699	653	610	570	533	498	466	435	407	380	355	332	310	290	271	253	237	221	207	193	181	169	158	147															
Glassbusters (motor)	0	28	26	24	23	21	20	19	17	16	15	14	13	12	12	11	10	9	9	8	8	7	7	6	6	6															
Glassbusters (conveyor mean)	0	150	140	131	122	114	107	100	93	87	81	76	71	66	62	58	54	51	47	44	41	39	36	34	32	29															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Hammers	0	252	236	220	206	193	180	168	157	147	137	128	120	112	105	98	91	85	80	75	70	65	61	57	53	50															
Transport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
All exported waste streams	0	30,958	28,932	27,040	25,271	23,617	22,072	20,628	19,279	18,018	16,839	15,737	14,708	13,746	12,846	12,006	11,220	10,486	9,800	9,159	8,560	8,000	7,477	6,988	6,530	6,103															
Excl. chipped plastic	0	24,842	23,217	21,698	20,279	18,952	17,712	16,553	15,470	14,458	13,512	12,628	11,802	11,030	10,309	9,634	9,004	8,415	7,864	7,350	6,869	6,420	6,000	5,607	5,240	4,898															
x																																									
Total																																									
Glass																																									
Glass imploder	35,000	925	865	808	755	706	660	617	576	538	503	470	440	411	384	359	335	313	293	274	256	239	223	209	195	182															
Glassbusters	32,250	925	865	808	755	706	660	617	576	538	503	470	440	411	384	359	335	313	293	274	256	239	223	209	195	182															
Krystaline	55,960	925	865	808	755	706	660	617	576	538	503	470	440	411	384	359	335	313	293	274	256	239	223	209	195	182															
Cans/tins																																									
Low	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
High	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic																																									
Chipper	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Baler	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	31,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Transport (shipping)																																									
Inc plastic	0	30,958	28,932	27,040	25,271	23,617	22,072	20,628	19,279	18,018	16,839	15,737	14,708	13,746	12,846	12,006	11,220	10,486	9,800	9,159	8,560	8,000	7,477	6,988	6,530	6,103															
Excl plastic	0	24,842	23,217	21,698	20,279	18,952	17,712	16,553	15,470	14,458	13,512	12,628	11,802	11,030	10,309	9,634	9,004	8,415	7,864	7,350	6,869	6,420	6,000	5,607	5,240	4,898															
Total costs																																									
1. Lowest initial cost: Glassbusters, vertical can compactor, plastic baler	59,250	31,883	29,797	27,848	26,026	24,323	22,732	21,245	19,855	18,556	17,342	16,208	15,147	14,156	13,230	12,365	11,556	10,800	10,093	9,433	8,816	8,239	7,700	7,196	6,726	6,286															
2. Highest initial cost: Krystaline, horizontal can compactor, plastic chipper	141,460	25,767	24,082	22,506	21,034	19,658	18,372	17,170	16,047	14,997	14,016	13,099	12,242	11,441	10,693	9,993	9,339	8,728	8,157	7,624	7,125	6,659	6,223	5,816	5,436	5,080															

Benefits - costs																										
1. Plastic baled	-59,250	76,104	71,125	66,472	62,123	58,059	54,261	50,711	47,394	44,293	41,395	38,687	36,156	33,791	31,580	29,514	27,583	25,779	24,092	22,516	21,043	19,667	18,380	17,178	16,054	15,004
2. Plastic chipped	-141,460	41,949	39,204	36,640	34,243	32,002	29,909	27,952	26,123	24,414	22,817	21,325	19,929	18,626	17,407	16,268	15,204	14,209	13,280	12,411	11,599	10,840	10,131	9,468	8,849	8,270

Net present value	
1. Plastic baled and recycled	889,713
2. Plastic chipped and landfilled	381,611

Total Benefit	
1 Plastic baled and recycled (high benefit, low cost)	948,963
2. Plastic chipped and landfilled (low benefit, high cost)	844,372
Total cost	
1. Plastic baled and recycled	456,808
2. Plastic chipped and landfilled	462,761
NPV	
1. Plastic baled and recycled	492,154
2. Plastic chipped and landfilled	381,611
Benefit-cost ratio	
1. Plastic baled and recycled	2.08
2. Plastic chipped and landfilled	1.82

Reuse/composting/recycling RAW DATA 0.1

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits revenue from recycling/substitution																																									
Glass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cullet (subsitution)	0	2,782	2,529	2,299	2,090	1,900	1,727	1,570	1,428	1,298	1,180	1,073	975	886	806	733	666	605	550	500	455	413	376	342	311	282															
Sand (substitution)	0	2,609	2,372	2,156	1,960	1,782	1,620	1,473	1,339	1,217	1,107	1,006	914	831	756	687	625	568	516	469	427	388	353	321	291	265															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel (revenue)	0	3,924	3,567	3,243	2,948	2,680	2,436	2,215	2,013	1,830	1,664	1,513	1,375	1,250	1,137	1,033	939	854	776	706	642	583	530	482	438	398															
Aluminium (revenue)	0	30,382	27,620	25,109	22,826	20,751	18,865	17,150	15,591	14,173	12,885	11,714	10,649	9,681	8,801	8,000	7,273	6,612	6,011	5,464	4,968	4,516	4,106	3,732	3,393	3,085															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper (revenue)	0	1,773	1,612	1,465	1,332	1,211	1,101	1,001	910	827	752	683	621	565	513	467	424	386	351	319	290	264	240	218	198	180															
Card (revenue)	0	2,236	2,033	1,848	1,680	1,527	1,389	1,262	1,148	1,043	948	862	784	713	648	589	535	487	442	402	366	332	302	275	250	227															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Rigid plastic: HDPE & PET (revenue)	0	2,195	1,996	1,814	1,649	1,500	1,363	1,239	1,127	1,024	931	846	769	700	636	578	526	478	434	395	359	326	297	270	245	223															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compost (import cost saving)	0	2,064	1,876	1,705	1,550	1,409	1,281	1,165	1,059	963	875	796	723	658	598	543	494	449	408	371	337	307	279	254	230	210															
Indirect benefits																																									
Landfill void space value																																									
Glass	0	567	516	469	426	387	352	320	291	265	241	219	199	181	164	149	136	123	112	102	93	84	77	70	63	58															
Steel	0	1,097	998	907	824	749	681	619	563	512	465	423	385	350	318	289	263	239	217	197	179	163	148	135	123	111															
Aluminium	0	1,097	998	907	824	749	681	619	563	512	465	423	385	350	318	289	263	239	217	197	179	163	148	135	123	111															
Paper	0	75	68	62	56	51	46	42	38	35	32	29	26	24	22	20	18	16	15	13	12	11	10	9	8	8															
Card	0	99	90	82	74	68	62	56	51	46	42	38	35	32	29	26	24	22	20	18	16	15	13	12	11	10															
Rigid plastic	0	792	720	654	595	541	492	447	406	369	336	305	278	252	229	209	190	172	157	142	129	118	107	97	88	80															
Green waste	0	189	172	156	142	129	117	107	97	88	80	73	66	60	55	50	45	41	37	34	31	28	26	23	21	19															
Totals																																									
Glass																																									
Cullet	0	3,349	3,045	2,768	2,516	2,287	2,080	1,890	1,719	1,562	1,420	1,291	1,174	1,067	970	882	802	729	663	602	548	498	453	411	374	340															
Sand	0	3,176	2,888	2,625	2,386	2,169	1,972	1,793	1,630	1,482	1,347	1,225	1,113	1,012	920	836	760	691	628	571	519	472	429	390	355	322															
Cans/tins	0	45,509	41,372	37,611	34,192	31,083	28,258	25,689	23,353	21,230	19,300	17,546	15,951	14,501	13,182	11,984	10,895	9,904	9,004	8,185	7,441	6,765	6,150	5,591	5,082	4,620															
Paper/card	0	11,204	10,185	9,259	8,417	7,652	6,957	6,324	5,749	5,227	4,751	4,319	3,927	3,570	3,245	2,950	2,682	2,438	2,217	2,015	1,832	1,665	1,514	1,376	1,251	1,137															
Plastic																																									
Baled	0	7,986	7,260	6,600	6,000	5,455	4,959	4,508	4,098	3,726	3,387	3,079	2,799	2,545	2,313	2,103	1,912	1,738	1,580	1,436	1,306	1,187	1,079	981	892	811															
Green waste	0	5,980	5,436	4,942	4,493	4,084	3,713	3,376	3,069	2,790	2,536	2,306	2,096	1,905	1,732	1,575	1,432	1,301	1,183	1,076	978	889	808	735	668	607															
Total benefits																																									
1. Lowest benefit: glass used for sand, plastic chipped and lar	0	65,869	59,881	54,437	49,488	44,989	40,900	37,181	33,801	30,728	27,935	25,395	23,087	20,988	19,080	17,345	15,769	14,335	13,032	11,847	10,770	9,791	8,901	8,092	7,356	6,687															
2. Highest benefit: glass used for cullet, pastic baled and recy	0	74,028	67,298	61,180	55,618	50,562	45,966	41,787	37,988	34,535	31,395	28,541	25,946	23,588	21,443	19,494	17,722	16,111	14,646	13,315	12,104	11,004	10,003	9,094	8,267	7,516															

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs plant and machinery																																									
Glass																																									
Glass imploder (mean)	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Glassbusters	32,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Krystaline	55,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (vertical mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (horizontal mean)	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Biodigester (kitchen waste)	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (garden waste mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Direct costs Maintenance																																									
Glass																																									
Glassbusters (blades)	0	727	661	601	546	497	452	411	373	339	308	280	255	232	211	192	174	158	144	131	119	108	98	89	81	74															
Glassbusters (motor)	0	27	25	23	20	19	17	15	14	13	12	11	10	9	8	7	7	6	5	5	4	4	4	3	3	3															
Glassbusters (conveyor mean)	0	145	132	120	109	99	90	82	75	68	62	56	51	46	42	38	35	32	29	26	24	22	20	18	16	15															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Hammers	0	245	223	203	184	168	152	139	126	115	104	95	86	78	71	65	59	53	49	44	40	36	33	30	27	25															
Transport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
All exported waste streams	0	30,113	27,376	24,887	22,625	20,568	18,698	16,998	15,453	14,048	12,771	11,610	10,555	9,595	8,723	7,930	7,209	6,554	5,958	5,416	4,924	4,476	4,069	3,699	3,363	3,057															
Excl. chipped plastic	0	24,165	21,968	19,971	18,155	16,505	15,004	13,640	12,400	11,273	10,248	9,316	8,470	7,700	7,000	6,363	5,785	5,259	4,781	4,346	3,951	3,592	3,265	2,969	2,699	2,453															
x																																									
Total																																									
Glass																																									
Glass imploder	35,000	900	818	744	676	615	559	508	462	420	382	347	315	287	261	237	215	196	178	162	147	134	122	111	101	91															
Glassbusters	32,250	900	818	744	676	615	559	508	462	420	382	347	315	287	261	237	215	196	178	162	147	134	122	111	101	91															
Krystaline	55,960	900	818	744	676	615	559	508	462	420	382	347	315	287	261	237	215	196	178	162	147	134	122	111	101	91															
Cans/tins																																									
Low	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
High	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic																																									
Chipper	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Baler	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	31,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Transport (shipping)																																									
Inc plastic	0	30,113	27,376	24,887	22,625	20,568	18,698	16,998	15,453	14,048	12,771	11,610	10,555	9,595	8,723	7,930	7,209	6,554	5,958	5,416	4,924	4,476	4,069	3,699	3,363	3,057															
Excl plastic	0	24,165	21,968	19,971	18,155	16,505	15,004	13,640	12,400	11,273	10,248	9,316	8,470	7,700	7,000	6,363	5,785	5,259	4,781	4,346	3,951	3,592	3,265	2,969	2,699	2,453															
Total costs																																									
1. Lowest initial cost: Glassbusters, vertical can compactor, p	59,250	31,013	28,194	25,631	23,301	21,183	19,257	17,506	15,915	14,468	13,153	11,957	10,870	9,882	8,983	8,167	7,424	6,749	6,136	5,578	5,071	4,610	4,191	3,810	3,464	3,149															
2. Highest initial cost: Krystaline, horizontal can compactor, p	141,460	25,065	22,786	20,715	18,831	17,119	15,563	14,148	12,862	11,693	10,630	9,663	8,785	7,986	7,260	6,600	6,000	5,455	4,959	4,508	4,098	3,726	3,387	3,079	2,799	2,545															
Benefits - costs																																									
1. Plastic baled	-59,250	34,856	31,687	28,806	26,188	23,807	21,643	19,675	17,886	16,260	14,782	13,438	12,217	11,106	10,096	9,179	8,344	7,586	6,896	6,269	5,699	5,181	4,710	4,282	3,893	3,539															
2. Plastic chipped	-141,460	40,805	37,095	33,723	30,657	27,870	25,336	23,033	20,939	19,036	17,305	15,732	14,302	13,002	11,820	10,745	9,768	8,880	8,073	7,339	6,672	6,065	5,514	5,013	4,557	4,143															

Net present value	
1. Plastic baled and recycled	288,776
2. Plastic chipped and landfilled	265,963

Total Benefit	
1. Plastic baled and recycled	739,152
2. Plastic chipped and landfilled	657,686
Total cost	
1. Plastic baled and recycled	368,910
2. Plastic chipped and landfilled	391,723
NPV	
1. Plastic baled and recycled	370,242
2. Plastic chipped and landfilled	265,963
Benefit-cost ratio	
1. Plastic baled and recycled	2.00
2. Plastic chipped and landfilled	1.68

Reuse/composting/recycling RAW DATA 0.04

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct benefits revenue from recycling/substitution																																									
Glass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cullet (subsitution)	0	2,942	2,829	2,720	2,616	2,515	2,418	2,325	2,236	2,150	2,067	1,988	1,911	1,838	1,767	1,699	1,634	1,571	1,511	1,452	1,397	1,343	1,291	1,242	1,194	1,148															
Sand (substitution)	0	2,760	2,653	2,551	2,453	2,359	2,268	2,181	2,097	2,016	1,939	1,864	1,793	1,724	1,657	1,594	1,532	1,473	1,417	1,362	1,310	1,259	1,211	1,164	1,120	1,077															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel (revenue)	0	4,150	3,990	3,837	3,689	3,547	3,411	3,280	3,154	3,032	2,916	2,804	2,696	2,592	2,492	2,397	2,304	2,216	2,130	2,049	1,970	1,894	1,821	1,751	1,684	1,619															
Aluminium (revenue)	0	32,135	30,899	29,710	28,568	27,469	26,412	25,396	24,420	23,480	22,577	21,709	20,874	20,071	19,299	18,557	17,843	17,157	16,497	15,863	15,252	14,666	14,102	13,559	13,038	12,536															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper (revenue)	0	1,875	1,803	1,734	1,667	1,603	1,541	1,482	1,425	1,370	1,317	1,267	1,218	1,171	1,126	1,083	1,041	1,001	963	926	890	856	823	791	761	731															
Card (revenue)	0	2,365	2,274	2,187	2,103	2,022	1,944	1,869	1,797	1,728	1,662	1,598	1,537	1,477	1,421	1,366	1,313	1,263	1,214	1,168	1,123	1,080	1,038	998	960	923															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Rigid plastic: HDPE & PET (revenue)	0	2,322	2,233	2,147	2,064	1,985	1,909	1,835	1,765	1,697	1,631	1,569	1,508	1,450	1,395	1,341	1,289	1,240	1,192	1,146	1,102	1,060	1,019	980	942	906															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compost (import cost saving)	0	2,183	2,099	2,018	1,940	1,866	1,794	1,725	1,659	1,595	1,534	1,475	1,418	1,363	1,311	1,260	1,212	1,165	1,121	1,077	1,036	996	958	921	886	852															
Indirect benefits																																									
Landfill void space value																																									
Glass	0	600	577	555	533	513	493	474	456	438	422	405	390	375	360	346	333	320	308	296	285	274	263	253	243	234															
Steel	0	1,161	1,116	1,073	1,032	992	954	917	882	848	815	784	754	725	697	670	644	620	596	573	551	530	509	490	471	453															
Aluminium	0	1,161	1,116	1,073	1,032	992	954	917	882	848	815	784	754	725	697	670	644	620	596	573	551	530	509	490	471	453															
Paper	0	79	76	73	70	67	65	62	60	58	55	53	51	49	47	46	44	42	40	39	37	36	35	33	32	31															
Card	0	105	101	97	93	90	86	83	80	77	74	71	68	65	63	61	58	56	54	52	50	48	46	44	43	41															
Rigid plastic	0	838	805	774	745	716	688	662	636	612	588	566	544	523	503	484	465	447	430	413	398	382	368	353	340	327															
Green waste	0	200	192	185	178	171	164	158	152	146	141	135	130	125	120	115	111	107	103	99	95	91	88	84	81	78															
Totals																																									
Glass																																									
Cullet	0	3,542	3,406	3,275	3,149	3,028	2,912	2,800	2,692	2,588	2,489	2,393	2,301	2,213	2,127	2,046	1,967	1,891	1,819	1,749	1,681	1,617	1,554	1,495	1,437	1,382															
Sand	0	3,360	3,230	3,106	2,987	2,872	2,761	2,655	2,553	2,455	2,360	2,270	2,182	2,098	2,018	1,940	1,865	1,794	1,725	1,658	1,595	1,533	1,474	1,418	1,363	1,311															
Cans/tins	0	48,135	46,283	44,503	42,791	41,146	39,563	38,041	36,578	35,171	33,819	32,518	31,267	30,065	28,908	27,797	26,727	25,699	24,711	23,761	22,847	21,968	21,123	20,311	19,529	18,778															
Paper/card	0	11,850	11,394	10,956	10,535	10,129	9,740	9,365	9,005	8,659	8,326	8,005	7,698	7,401	7,117	6,843	6,580	6,327	6,083	5,849	5,625	5,408	5,200	5,000	4,808	4,623															
Plastic																																									
Baled	0	8,447	8,122	7,810	7,509	7,221	6,943	6,676	6,419	6,172	5,935	5,707	5,487	5,276	5,073	4,878	4,690	4,510	4,337	4,170	4,009	3,855	3,707	3,564	3,427	3,295															
Green waste	0	6,325	6,082	5,848	5,623	5,407	5,199	4,999	4,806	4,622	4,444	4,273	4,109	3,951	3,799	3,653	3,512	3,377	3,247	3,122	3,002	2,887	2,776	2,669	2,566	2,468															
Total benefits																																									
1. Lowest benefit: glass used for sand, plastic chipped and lar	0	69,669	66,990	64,413	61,936	59,554	57,263	55,061	52,943	50,907	48,949	47,066	45,256	43,515	41,842	40,232	38,685	37,197	35,766	34,391	33,068	31,796	30,573	29,397	28,267	27,179															
2. Highest benefit: glass used for cullet, pastic baled and recy	0	78,299	75,288	72,392	69,608	66,930	64,356	61,881	59,501	57,212	55,012	52,896	50,862	48,905	47,024	45,216	43,477	41,804	40,197	38,651	37,164	35,735	34,360	33,039	31,768	30,546															

Item	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Direct Costs plant and machinery																																									
Glass																																									
Glass imploder (mean)	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Glassbusters	32,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Krystaline	55,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Cans/tins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (vertical mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Steel/alu compactor/baler (horizontal mean)	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Compactor/baler (mean)	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Biodigester (kitchen waste)	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Chipper (garden waste mean)	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Direct costs Maintenance																																									
Glass																																									
Glassbusters (blades)	0	769	740	711	684	658	632	608	585	562	540	520	500	480	462	444	427	411	395	380	365	351	338	325	312	300															
Glassbusters (motor)	0	29	28	27	26	25	24	23	22	21	20	19	19	18	17	17	16	15	15	14	14	13	13	12	12	11															
Glassbusters (conveyor mean)	0	154	148	142	137	132	126	122	117	112	108	104	100	96	92	89	85	82	79	76	73	70	68	65	62	60															
Green waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Hammers	0	260	250	240	231	222	213	205	197	190	182	175	169	162	156	150	144	139	133	128	123	118	114	110	105	101															
Transport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
All exported waste streams	0	31,851	30,626	29,448	28,315	27,226	26,179	25,172	24,204	23,273	22,378	21,517	20,690	19,894	19,129	18,393	17,686	17,005	16,351	15,722	15,118	14,536	13,977	13,440	12,923	12,426															
Excl. chipped plastic	0	25,559	24,576	23,630	22,722	21,848	21,007	20,199	19,422	18,675	17,957	17,267	16,602	15,964	15,350	14,759	14,192	13,646	13,121	12,616	12,131	11,665	11,216	10,785	10,370	9,971															
x																																									
Total																																									
Glass																																									
Glass imploder	35,000	952	915	880	846	814	782	752	723	696	669	643	618	595	572	550	529	508	489	470	452	434	418	402	386	371															
Glassbusters	32,250	952	915	880	846	814	782	752	723	696	669	643	618	595	572	550	529	508	489	470	452	434	418	402	386	371															
Krystaline	55,960	952	915	880	846	814	782	752	723	696	669	643	618	595	572	550	529	508	489	470	452	434	418	402	386	371															
Cans/tins																																									
Low	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
High	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Paper/card	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Plastic																																									
Chipper	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Baler	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Green waste	31,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
Transport (shipping)																																									
Inc plastic	0	31,851	30,626	29,448	28,315	27,226	26,179	25,172	24,204	23,273	22,378	21,517	20,690	19,894	19,129	18,393	17,686	17,005	16,351	15,722	15,118	14,536	13,977	13,440	12,923	12,426															
Excl plastic	0	25,559	24,576	23,630	22,722	21,848	21,007	20,199	19,422	18,675	17,957	17,267	16,602	15,964	15,350	14,759	14,192	13,646	13,121	12,616	12,131	11,665	11,216	10,785	10,370	9,971															
Total costs																																									
1. Lowest initial cost: Glassbusters, vertical can compactor, p	59,250	32,803	31,541	30,328	29,161	28,040	26,961	25,924	24,927	23,969	23,047	22,160	21,308	20,488	19,700	18,943	18,214	17,514	16,840	16,192	15,570	14,971	14,395	13,841	13,309	12,797															
2. Highest initial cost: Krystaline, horizontal can compactor, p	141,460	26,511	25,491	24,511	23,568	22,661	21,790	20,952	20,146	19,371	18,626	17,910	17,221	16,558	15,922	15,309	14,720	14,154	13,610	13,086	12,583	12,099	11,634	11,186	10,756	10,342															
Benefits - costs																																									
1. Plastic baled	-59,250	36,867	35,449	34,085	32,774	31,514	30,302	29,136	28,016	26,938	25,902	24,906	23,948	23,027	22,141	21,290	20,471	19,683	18,926	18,198	17,498	16,825	16,178	15,556	14,958	14,382															
2. Plastic chipped	-141,460	43,159	41,499	39,903	38,368	36,892	35,473	34,109	32,797	31,536	30,323	29,156	28,035	26,957	25,920	24,923	23,964	23,043	22,156	21,304	20,485	19,697	18,939	18,211	17,511	16,837															

Net present value	
1. Plastic baled and recycled	539,721
2. Plastic chipped and landfilled	559,737

Total Benefit	
1. Plastic baled and recycled	1,272,122
2. Plastic chipped and landfilled	1,131,913
Total cost	
1. Plastic baled and recycled	592,193
2. Plastic chipped and landfilled	572,176
NPV	
1. Plastic baled and recycled	679,929
2. Plastic chipped and landfilled	559,737
Benefit-cost ratio	
1. Plastic baled and recycled	2.15
2. Plastic chipped and landfilled	1.98

Option	Items	Volume of waste	Costs	Benefits	Comments
Option 1	Land fill				
	BAU				
	Costs		1,500,000		years 5 -15
Option 2	New landfill at donkey Point				
	Options appraisal		40,000		
	EMD mgmt		72,000		
	Chief Engineer		20,000		
	Access road		330,000		
	Land cost		679,250		
	Site clearance		164,000		
	Fencing		28,520		
	Double leaf gates		1,449		
	Internal roads and drainage		100,000		
	Public recycling facility		105,000		
	RCV waste reception building		520,000		
	Landfill surface preparation		404,000		
	Waste cell excavation		17,395		
	Utlities and infrastructure		3,000		
	Incinerator compound		30,193		
	Hazardous waste cell		22,707		
	Relocation and contingency		65,000		
	Planning application		800		
			2,603,314		
Option 3	Incinerator				
	IED compliance		200,000		Ascension Island
	Generalised costs		170,000		used - small incinerator (300 kg/hr) excl taxes and shipping
	Generalised costs		327,000		new - small incinerator (300 kg/hr) excl taxes and shipping
	Fuel consumption	25-30			Litres of diesel/hr (source: https://www.inciner8.com/general-incinerator/I8-250G)
	Volume of incineratable waste	285			tonnes
	Required burn time at 300kg/hr	950			hours
	Fuel requirement (mean)	26125			Litres
	Fuel cost at £0.94/litre (~75% of £1.25 retail price)		24,558		
Option 4	Reuse, composting and recycling				
Glass		135			tonnes
	Glass imploder		30000 - 40000		
	Glassbusters		32,250		Excl. shipping
	Glassbusters (blades)		800		Blades per 150 tons
	Glassbusters (motors)		150		frequency not specified
	Glassbusters (conveyor)		600 - 1000		every 5 years
	Krystaline		55,960		Excl. shipping
	Glass value			3,500	per annum
	Glass value (cullet)			3,060	per annum Saving on aggregate costs
	Glass value (substitute for sand)			2,870	per annum
	Landfill void space value			624	per annum
Cans/tins		130			tonnes
	Steel/alu compactor/baler (vertical)		8,000 - 10,000		Excl. VAT
	Steel/alu compactor/baler (horizontal)		25,000 - 30,000		Excl. VAT
	Steel value			83	per bale
	Steel value			110	per tonne
	Alu value			557	per bale
	Alu value			810	per tonne
	Landfill void space value			1,207	per annum
	Return (after processing and shipping costs)			15,000	per annum
Paper/card		70			tonnes
	Compactor/baler		8,000 - 10,000		
	Paper value			65	per bale
	Paper value			105	per tonne
	Card value			41	per bale
	Card value			110	per tonne
	Shipping costs		14,000		
Plastic		35			tonnes
	Chipper		15,000 - 20,000		Sent to landfill
	Compactor/baler		8,000 - 10,000		
	HDPE value			234	per bale
	HDPE value			390	per tonne
	PET value			100	per bale
	PET value			145	per tonne
	HDPE-PET value			69	per bale
	HDPE-PET value			100	per tonne
	Landfill void space (HDPE-PET)			871	
Textiles	No cost/benefit data	25			tonnes
Polystyrene	No cost/benefit data	13			tonnes
Hazardous waste	No cost/benefit data				
End of life vehicles	No cost/benefit data				
Composting	Garden waste	12			tonnes
	Kitchen waste	130			tonnes
	LEMP compost/mulch import costs (benefit)			11,350	Over 5 years
	Biodigester (kitchen waste)		14,000		excl. shipping and import costs
	Chipper (garden/green waste)		15,000 - 20,000		
	Hammers (processing)		537		1-2 years, excl. shipping and duty
	Landfill void space (green waste)			208	
	Vegetable matter CF m3 per tonne	0.75			https://www.sustainabilityexchange.ac.uk/conversion_factors_fc
	Volume of garden waste	9			
	Volume of food waste	97.5			
		106.5			
	Value of void space	1.95			£/m3

Estimated costs for identification, consultation and construction / transfer of assets to a 10Ha site in Donkey Plain

Item	Rate	Units	Indicative Cost	Reference (date)
Options Appraisal	£40,000	1	£40,000	Estimate
EMD Project Management	£4,000	18	£72,000	Estimate Full time at Head of Waste Management Grade (months) plus junior support
Chief Engineer to oversee construction	£1,666	12	£20,000	Estimate EMD time cost planning EIA & consultation
Two way access road avoiding quarry.	£275	1200	£330,000	(£275/ linear m, total length 1.2km) (B Hathway, road division *pers coms* June 2015) £
Land cost	£27,500	24.7	£679,250	£25-£30,000 per acre for Donkey Plain Area (G Henry, Crown Estates, *pers coms* June 2015). Current site is 10Ha is 24.7 acres
Site clearance	£1.64	10,0000	£164,000	Site clearance BR BoQ 2014
Fencing	£23	1240	£28,520	2m high security fencing, installed. BR BoQ 2014. R
Double leaf gates	£483	3	£1,449	BR BoQ 2014
Internal roads and drainage channels	£100,000	1	£100,000	BR BoQ 2014
Public Recycling Facility	£105,000	1	£105,000	BR BoQ 2014
RCV Waste Reception Building	£520,000	1	£520,000	BR BoQ 2014
Landfill surface preparation	£6.04	67000	£404,680	For area of same size as was currently cleared. Donkey Plain is on rock so taken to be hard rock excavation value.
Waste cell excavation	£6.04	2880	£17,395	Cost per cell excavated into rock.

Item	Rate	Units	Indicative Cost	Reference (date)
Utilities & infrastructure	£3,000	1	£3,000	Estimate based on Landfill upgrade costs
Incinerator compound	£30,193	1	£30,193	Budget sheet 2015
Hazardous waste cell	£22,707	1	£22,707	Budget sheet 2015
Relocation and contingency	£65,000	1	£65,000	Estimate
Planning Application	£800	1	£800	2012-13 Capital Budget

Table 4.2 Value of Separated Recycled Waste

Recycled Material	Bale Size (m^3)	Bale Weight (kg)	No of Bales per container	Value per tonne (£)	Value per bale (£)
Paper	1	600	16	105	65
Card	1	400	16	110	41
Plastic HDPE	1	600	16	390	234
Plastic PET	1	680	16	145	100
Mixed HDPE-PET	1	650	16	100	69
Aluminium Cans	1	650	16	810	557
Steel Cans	1	750	16	110	83
Copper	n/a	n/a	n/a	2,900	n/a

	Void space	Value of void space (£)
Paper	42	82
Cardboard	56	109
Rigid plasti	447	871
Green was	107	208

Material	2013 percentage	Annual tonnage	Recycled tonnage****	Bale weight (tonnes)	Void space per tonne	Annual no of bales	Value per bale (£)	Annual bale value (£)	Void space saved (m^3)	Value of void space (£)***
Paper	4.6	30	18	0.6	0.43	30	65	1,950	42	82
Cardboard	6.1	40	24	0.4	0.43	60	41	2,460	56	109
Steel	20.3	130	78	0.75	0.063	104	83	8,632	1,238	2,414
Rigid Plastic (HDPE & PET)	5.7	35	21	0.6	0.047	35	69	2,415	447	871
Total annual bales						229	Total annual export value (£)	**£15,457**	Cost of void space saved	3,476
Total containers**						14.3125	annual export cost (£)**	£42,866		
							Difference	-£27,409	Total Surplus / Deficit	-£23,933

*containers hold 16 m^3 bales of whatever material.
** based on RMS current prices of £2,995 per 20ft container.
*** void space valued at £1.95/m^3
**** assumes 60% recycling rate

Table 4.3 Projected waste streams based on 2013 waste wheel data, exporting all materials suitable for resale.

Material	2013 (%)	Annual tonnage	Recycled tonnage****	Bale weight (tonnes)	Void space per tonne	Annual no of bales	Value per bale (£)	Annual bale value (£)	Void space saved (m^3)	Value of void space (£)***
Paper	4.6	30	18	0.6	0.43	30	65	1,950	42	82
Cardboard	6.1	40	24	0.4	0.43	60	41	2,460	56	109
Steel	10.15	65	39	0.75	0.063	52	83	4,316	619	1,207
Aluminium	10.15	65	39	0.65	0.063	60	557	33,420	619	1,207
Rigid Plastic (HDPE & PET)	5.7	35	21	0.6	0.047	35	69	2,415	447	871
Total annual bales						177	Total annual export value (£)	£44,561	Cost of void space saved	£3,476
Total containers*						11.06	annual export cost (£)**	£33,132		
							Difference	**+£11,429**	Total Surplus/ Deficit	**+£14,905**

*containers hold 16 m^3 bales of whatever material.
** based on RMS current prices of £2,995 per 20ft container.
*** void space valued at £1.95/m^3
**** assumes 60% recycling rate

Table 4.4 Projected waste streams based on 2013 waste wheel data but where an assumed 50% of tins and cans are aluminium (i.e. the majority of drinks cans are aluminium), exporting all materials suitable for resale.