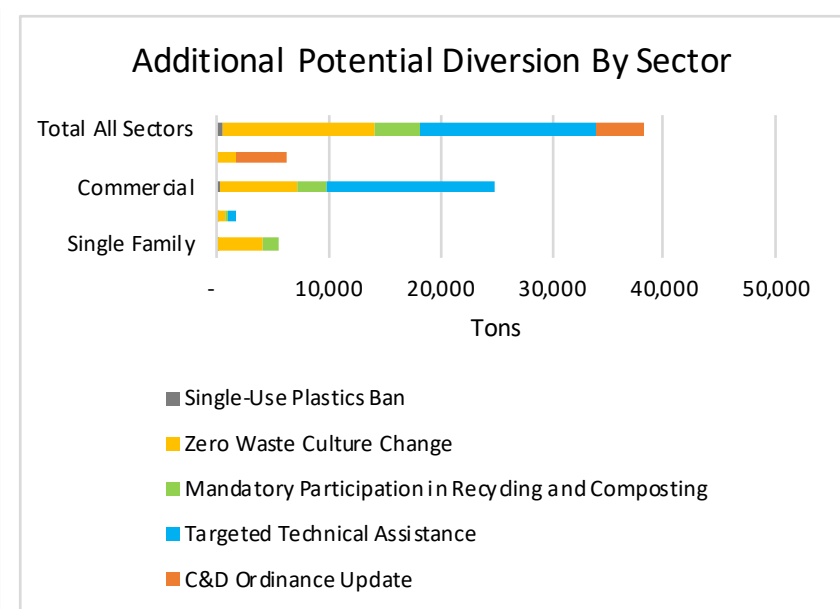
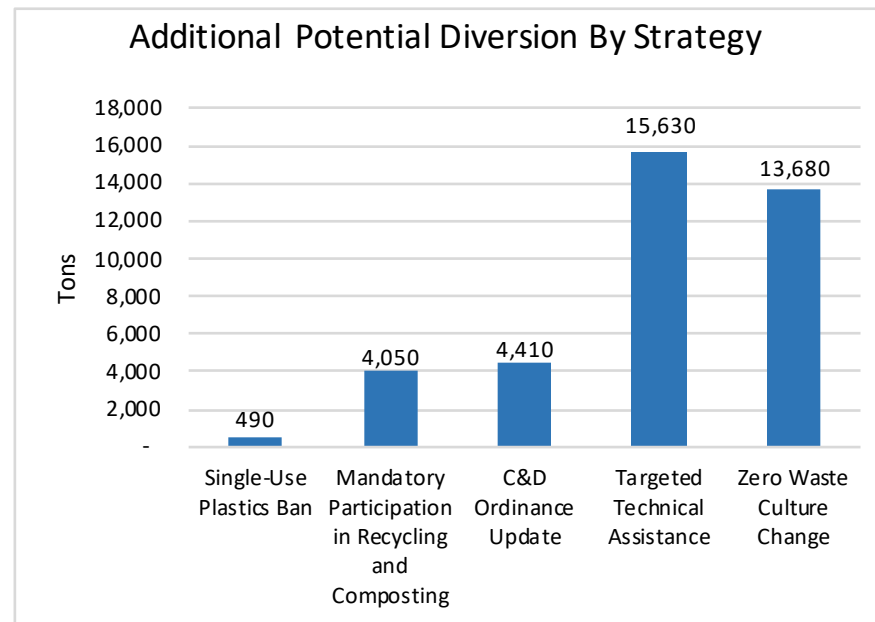


Recommended Zero Waste Strategy		Additional Potential Diversion				
		Single Family	Multi-Family	Commercial	Self-Haul	Total All Sectors
1	Single-Use Plastics Ban	150	30	310	N/A	490
2	Mandatory Participation in Recycling and Composting	1,330	280	2,440	N/A	4,050
3	C&D Ordinance Update	N/A	N/A	N/A	4,410	4,410
4	Targeted Technical Assistance	N/A	560	15,070	N/A	15,630
5	Zero Waste Culture Change	4,090	800	7,020	1,770	13,680
TOTAL		5,570	1,670	24,840	6,180	38,260



Residential - Single Family						
Material	Garbage		Single-Use Plastics Ban		Zero Waste Culture Change	
	Est. %	Est. Tons	Capture Rate	Tons	Capture Rate	Tons
Paper	18.4%	5,982				
Corrugated Cardboard and Kraft	2.1%	676	0%	-	10%	68
Newspaper	1.2%	381	0%	-	10%	38
Other Recyclable Paper	5.7%	1,850	0%	-	10%	185
Polycoated Paper	0.2%	71	0%	-	10%	7
Compostable Paper	8.5%	2,780	0%	-	10%	278
Non-Recoverable Paper	0.7%	225	0%	-	10%	22
Plastic	13.3%	4,342		-		-
#1 & #2 Plastic Containers	2.0%	653	5%	33	10%	65
Other Recyclable Plastics	3.5%	1,141	5%	57	10%	114
Recoverable Film	1.3%	413	0%	-	10%	41
Non-recoverable Film	4.8%	1,556	0%	-	10%	156
Non-recoverable Plastics	1.8%	579	10%	58	15%	87
Glass	2.8%	913		-		-
Glass Containers	2.6%	833	0%	-	10%	83
Non-recoverable Glass	0.2%	80	0%	-	10%	8
Metal	3.1%	1,013		-		-
Tin/Steel Cans	0.8%	270	0%	-	10%	27
Aluminum Cans & Foil	0.3%	107	0%	-	10%	11
Other Recoverable Metal	1.4%	450	0%	-	10%	45
Non-recoverable Metal	0.6%	186	0%	-	10%	19
Organics	42.5%	13,854		-		-
Food	24.1%	7,840	0%	-	20%	1,568
Yard Waste	4.7%	1,545	0%	-	10%	154
Textiles	4.0%	1,314	0%	-	10%	131
Non-recoverable Organics	9.7%	3,155	0%	-	10%	316
Construction & Demolition	11.4%	3,719		-		-
Recoverable Wood	1.8%	577	0%	-	10%	58
Carpet	1.0%	328	0%	-	10%	33
Recoverable C&D	5.6%	1,812	0%	-	10%	181

Non-recoverable C&D	3.1%	1,002	0%	-	10%	100
Other Materials	8.4%	2,747		-		-
Household Hazardous Waste	0.4%	117	0%	-	10%	12
Electronic Waste	0.4%	121	0%	-	10%	12
Tires	0.1%	16	0%	-	10%	2
Bulky Items	0.9%	303	0%	-	15%	45
Non-recoverable Other	6.7%	2,190	0%	-	10%	219
Totals	0.0%	100.0%	32,570	0%	148	4,085

Mandatory Recycling and Composting		Total	
Capture Rate	Tons	Capture Rate	Tons
7%	47	17%	115
7%	27	17%	65
7%	130	17%	315
0%	-	10%	7
7%	195	17%	473
0%	-	10%	22
	-	0%	-
7%	46	22%	144
7%	80	22%	251
7%	29	17%	70
0%	-	10%	156
0%	-	25%	145
	-	0%	-
7%	58	17%	142
0%	-	10%	8
	-	0%	-
7%	19	17%	46
7%	7	17%	18
7%	32	17%	77
0%	-	10%	19
	-	0%	-
7%	549	27%	2,117
7%	108	17%	263
0%	-	10%	131
0%	-	10%	316
	-	0%	-
0%	-	10%	58
0%	-	10%	33
0%	-	10%	181

Santa Rosa Zero Waste Plan - Appendix F

0%	-	10%	100
	-	0%	-
0%	-	10%	12
0%	-	10%	12
0%	-	10%	2
0%	-	15%	45
0%	-	10%	219
4%	1,326	17%	5,558

Residential - Multifamily						
Material	Garbage		Single-Use Plastics Ban		Zero Waste Culture Change	
	Est. %	Est. Tons	Capture Rate	Tons	Capture Rate	Tons
Paper	22.1%	1,396				
Corrugated Cardboard and Kraft	2.9%	185	0%	-	10%	18.54
Newspaper	1.8%	116	0%	-	10%	11.64
Other Recyclable Paper	9.1%	576	0%	-	10%	57.55
Polycoated Paper	0.2%	15	0%	-	10%	1.51
Compostable Paper	6.8%	429	0%	-	10%	42.92
Non-Recoverable Paper	1.2%	74	0%	-	10%	7.43
Plastic	13.7%	865		-		-
#1 & #2 Plastic Containers	2.8%	179	5%	9	10%	17.88
Other Recyclable Plastics	3.5%	219	5%	11	10%	21.86
Recoverable Film	1.1%	72	0%	-	10%	7.17
Non-recoverable Film	4.1%	258	0%	-	10%	25.78
Non-recoverable Plastics	2.2%	138	10%	14	15%	20.73
Glass	4.6%	288		-		-
Glass Containers	4.0%	253	0%	-	10%	25.30
Non-recoverable Glass	0.6%	35	0%	-	10%	3.52
Metal	4.2%	267		-		-
Tin/Steel Cans	1.1%	67	0%	-	10%	6.72
Aluminum Cans & Foil	0.4%	28	0%	-	10%	2.78
Other Recoverable Metal	1.7%	108	0%	-	10%	10.83
Non-recoverable Metal	1.0%	64	0%	-	10%	6.42
Organics	41.7%	2,633		-		-
Food	25.5%	1,608	0%	-	20%	321.68
Yard Waste	2.4%	154	0%	-	10%	15.39
Textiles	5.1%	322	0%	-	10%	32.23
Non-recoverable Organics	8.7%	549	0%	-	10%	54.85
Construction & Demolition	6.3%	399		-		-
Recoverable Wood	1.6%	103	0%	-	10%	10.30
Carpet	0.3%	17	0%	-	10%	1.67
Recoverable C&D	1.7%	109	0%	-	10%	10.92

Other Materials	Non-recoverable C&D	2.7%	170	0%	-	10%	17.03	
		7.3%	461		-		-	
	Household Hazardous Waste	0.2%	12	0%	-	10%	1.17	
	Electronic Waste	0.7%	45	0%	-	10%	4.47	
	Tires	0.0%	3	0%	-	10%	0.27	
	Bulky Items	1.8%	113	0%	-	15%	17.01	
	Non-recoverable Other	4.6%	288	0%	-	10%	28.84	
Totals		0.0%	100.0%	6,310	1%	34	13%	804

Mandatory Recycling and Composting		Targeted Technical Assistance		Total	
Capture Rate	Tons	Capture Rate	Tons	Capture Rate	Tons
7%	12.98	10%	18.54	27%	50
7%	8.15	10%	11.64	27%	31
7%	40.29	10%	57.55	27%	155
0%	-	10%	1.51	20%	3
7%	30.04	10%	42.92	27%	116
0%	-	10%	7.43	20%	15
	-		-	0%	-
7%	12.52	10%	17.88	32%	57
7%	15.30	10%	21.86	32%	70
7%	5.02	10%	7.17	27%	19
0%	-	10%	25.78	20%	52
0%	-	10%	13.82	35%	48
	-		-	0%	-
7%	17.71	10%	25.30	27%	68
0%	-	10%	3.52	20%	7
	-		-	0%	-
7%	4.70	10%	6.72	27%	18
7%	1.95	10%	2.78	27%	8
7%	7.58	10%	10.83	27%	29
0%	-	10%	6.42	20%	13
	-		-	0%	-
7%	112.59	10%	160.84	37%	595
7%	10.77	10%	15.39	27%	42
0%	-	10%	32.23	20%	64
0%	-	10%	54.85	20%	110
	-		-	0%	-
0%	-	0%	-	10%	10
0%	-	0%	-	10%	2
0%	-	0%	-	10%	11

0%	-	0%	-	10%	17
	-		-	0%	-
0%	-	10%	1.17	20%	2
0%	-	10%	4.47	20%	9
0%	-	0%	-	10%	0
0%	-	10%	11.34	25%	28
0%	-	0%	-	10%	29
4%	280	9%	562	27%	1,680

Commercial							
Material		Garbage		Single-Use Plastics Ban		Zero Waste Culture Change	
		Est. %	Est. Tons	Capture Rate	Tons	Capture Rate	Tons
Paper		24.4%	13,717				
	Corrugated Cardboard and Kraft	3.9%	2,167	0%	-	10%	217
	Newspaper	1.2%	647	0%	-	10%	65
	Other Recyclable Paper	7.4%	4,178	0%	-	10%	418
	Polycoated Paper	0.2%	117	0%	-	10%	12
	Compostable Paper	10.2%	5,734	0%	-	10%	573
	Non-Recoverable Paper	1.6%	874	0%	-	10%	87
Plastic		15.5%	8,697		-		-
	#1 & #2 Plastic Containers	1.9%	1,078	5%	54	10%	108
	Other Recyclable Plastics	3.0%	1,660	5%	83	10%	166
	Recoverable Film	1.7%	947	0%	-	10%	95
	Non-recoverable Film	5.8%	3,234	0%	-	10%	323
	Non-recoverable Plastics	3.2%	1,777	10%	178	15%	267
Glass		2.8%	1,551		-		-
	Glass Containers	2.2%	1,220	0%	-	10%	122
	Non-recoverable Glass	0.6%	331	0%	-	10%	33
Metal		3.8%	2,117		-		-
	Tin/Steel Cans	0.6%	339	0%	-	10%	34
	Aluminum Cans & Foil	0.4%	231	0%	-	10%	23
	Other Recoverable Metal	1.7%	957	0%	-	10%	96
	Non-recoverable Metal	1.1%	590	0%	-	10%	59
Organics		36.0%	20,188		-		-
	Food	23.2%	13,002	0%	-	20%	2,600
	Yard Waste	4.9%	2,759	0%	-	10%	276
	Textiles	3.5%	1,939	0%	-	10%	194
	Non-recoverable Organics	4.4%	2,488	0%	-	10%	249
Construction & Demolition		12.5%	7,007		-		-
	Recoverable Wood	4.2%	2,345	0%	-	10%	235
	Carpet	0.7%	386	0%	-	10%	39
	Recoverable C&D	3.2%	1,821	0%	-	10%	182

Other Materials	Non-recoverable C&D	4.4%	2,455	0%	-	10%	245	
		5.1%	2,873		-		-	
	Household Hazardous Waste	0.7%	371	0%	-	10%	37	
	Electronic Waste	0.6%	341	0%	-	10%	34	
	Tires	0.2%	89	0%	-	10%	9	
	Bulky Items	0.5%	274	0%	-	15%	41	
	Non-recoverable Other	3.2%	1,797	0%	-	10%	180	
Totals		0.0%	100.0%	56,150	1%	315	12%	7,018

Mandatory Recycling and Composting		Targeted Technical Assistance		Total	
Capture Rate	Tons	Capture Rate	Tons	Capture Rate	Tons
7%	152	30%	650	47%	1,019
7%	45	30%	194	47%	304
7%	292	30%	1,253	47%	1,964
0%	-	30%	35	40%	47
7%	401	30%	1,720	47%	2,695
0%	-	30%	262	40%	349
	-		-	0%	-
7%	75	30%	324	52%	561
7%	116	30%	498	52%	863
7%	66	30%	284	47%	445
0%	-	30%	970	40%	1,294
0%	-	30%	533	55%	977
	-		-	0%	-
7%	85	30%	366	47%	573
0%	-	30%	99	40%	132
	-		-	0%	-
7%	24	30%	102	47%	159
7%	16	30%	69	47%	108
7%	67	30%	287	47%	450
0%	-	30%	177	40%	236
	-		-	0%	-
7%	910	30%	3,901	57%	7,411
7%	193	30%	828	47%	1,297
0%	-	30%	582	40%	775
0%	-	30%	746	40%	995
	-		-	0%	-
0%	-	10%	235	20%	469
0%	-	10%	39	20%	77
0%	-	10%	182	20%	364

0%	-	10%	245	20%	491
	-		-	0%	-
0%	-	30%	111	40%	149
0%	-	30%	102	40%	136
0%	-	10%	9	20%	18
0%	-	30%	82	45%	123
0%	-	10%	180	20%	359
4%	2,444	27%	15,066	44%	24,843

Self-haul							
Material		Garbage Est. % Est. Tons		C&D Ordinance Update		Zero Waste Culture Change	
				Capture Rate	Tons	Capture Rate	Tons
Paper		9.5%	1,698				
	Corrugated Cardboard and Kraft	2.0%	350	45%	157	10%	35
	Newspaper	0.4%	72	0%	-	10%	7
	Other Recyclable Paper	4.9%	881	0%	-	10%	88
	Polycoated Paper	0.0%	9	0%	-	10%	1
	Compostable Paper	1.9%	336	0%	-	10%	34
	Non-Recoverable Paper	0.3%	51	0%	-	10%	5
Plastic		6.3%	1,126		-		-
	#1 & #2 Plastic Containers	0.6%	106	0%	-	10%	11
	Other Recyclable Plastics	1.9%	336	45%	151	10%	34
	Recoverable Film	1.0%	173	0%	-	10%	17
	Non-recoverable Film	0.9%	168	0%	-	10%	17
	Non-recoverable Plastics	1.9%	343	0%	-	10%	34
Glass		2.1%	372		-		-
	Glass Containers	0.8%	139	0%	-	10%	14
	Non-recoverable Glass	1.3%	233	0%	-	10%	23
Metal		3.2%	574		-		-
	Tin/Steel Cans	0.3%	60	0%	-	10%	6
	Aluminum Cans & Foil	0.1%	17	0%	-	10%	2
	Other Recoverable Metal	2.1%	372	45%	167	10%	37
	Non-recoverable Metal	0.7%	124	0%	-	10%	12
		18.1%	3,241		-		-
Organics	Food	3.5%	631	0%	-	10%	63
	Yard Waste	6.3%	1,118	45%	503	10%	112
	Textiles	4.2%	759	0%	-	10%	76
	Non-recoverable Organics	4.1%	732	0%	-	0%	-
Construction & Demolition		51.0%	9,100		-		-
	Recoverable Wood	15.8%	2,815	45%	1,267	10%	281
	Carpet	5.2%	920	45%	414	10%	92
	Recoverable C&D	15.5%	2,760	45%	1,242	10%	276

Non-recoverable C&D		14.6%	2,605	0%	-	10%	261
Other Materials	9.8%		1,749		-		-
Household Hazardous Waste		0.3%	47	0%	-	10%	5
Electronic Waste		0.9%	158	0%	-	10%	16
Tires		0.1%	25	0%	-	10%	3
Bulky Items		6.3%	1,125	45%	506	15%	169
Non-recoverable Other		2.2%	394	0%	-	10%	39
Totals	0.0%	100.0%	17,860	25%	4,408	10%	1,769

Total	
Capture Rate	Tons
55%	192
10%	7
10%	88
10%	1
10%	34
10%	5
0%	-
10%	11
55%	185
10%	17
10%	17
10%	34
0%	-
10%	14
10%	23
0%	-
10%	6
10%	2
55%	205
10%	12
0%	-
10%	63
55%	615
10%	76
0%	-
0%	-
55%	1,548
55%	506
55%	1,518

10%	261
0%	-
10%	5
10%	16
10%	3
60%	675
10%	39
35%	6,177

RECYCLED / COMPOSTED	SFD, MFD, (SELF-H	SFD, MFD, (SFD, MFD, (MFD, COM				
Material Categories - WARM	Single- Use Plastics Ban	C&D Ordinance Update	Zero Waste Culture Change	Mandator y Rec and Comp	Targeted Technical Assistance	TOTAL
						-
Aluminum Cans						-
Aluminum Ingot						-
Steel Cans						-
Copper Wire						-
Glass			244	161	391	797
HDPE	48		101	67	171	386
LDPE						-
PET	48		101	67	171	386
LLDPE						-
PP						-
PS						-
PVC						-
PLA						-
Corrugated Containers		157	338	212	669	1,376
Magazines/Third-class Mail						-
Newspaper			122	80	206	407
Office Paper						-
Phonebooks						-
Textbooks						-
Dimensional Lumber		1,267	584		235	2,085
Medium-density Fiberboard						-
Food Waste (non-meat)						-
Food Waste (meat only)						-
Beef						-
Poultry						-
Grains						-
Bread						-
Fruits and Vegetables						-
Dairy Products						-

Yard Trimmings		503	558	312	843	2,216
Grass						-
Leaves						-
Branches						-
Mixed Paper (general)			1,676	1,088	3,074	5,839
Mixed Paper (primarily residential)						-
Mixed Paper (primarily from offices)						-
Mixed Metals		167	301	179	478	1,125
Mixed Plastics	151	151	496	312	811	1,921
Mixed Recyclables						-
Food Waste			4,553	1,572	4,061	10,186
Mixed Organics			433	-	614	1,047
Mixed MSW						-
Carpet		414	165		39	618
Personal Computers			66		107	173
Clay Bricks						-
Concrete		311	163		46	519
Fly Ash						-
Tires			13		9	22
Asphalt Concrete		311	163		46	519
Asphalt Shingles		311	163		46	519
Drywall		311	163		46	519
Fiberglass Insulation						-
Vinyl Flooring						-
Wood Flooring						-
Total	247	3,902	10,402	4,050	12,060	30,660

Not included in WARM analysis; mc

SOURCE REDUCED

Mixed Paper (General)			144		306	450
Mixed Plastics	249		930		1,543	2,722
Glass			68		103	171
Mixed Metals			96		184	280
Mixed Organics			619		801	1,421
Fiberglass Insulation			312		123	434
Vinyl Flooring			312		123	434

Not included in WARM analysis; mc

Mixed Recyclables		506	794		386	1,686
Total	249	506	3,274	-	3,568	7,598

Not included in WARM analysis; mc

496 4,408 13,676 4,050 15,628 38,258
13,827

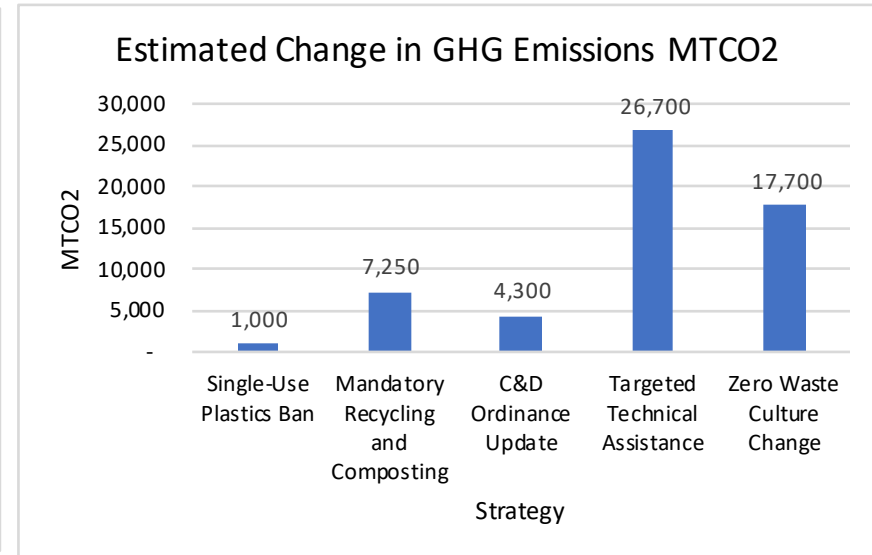
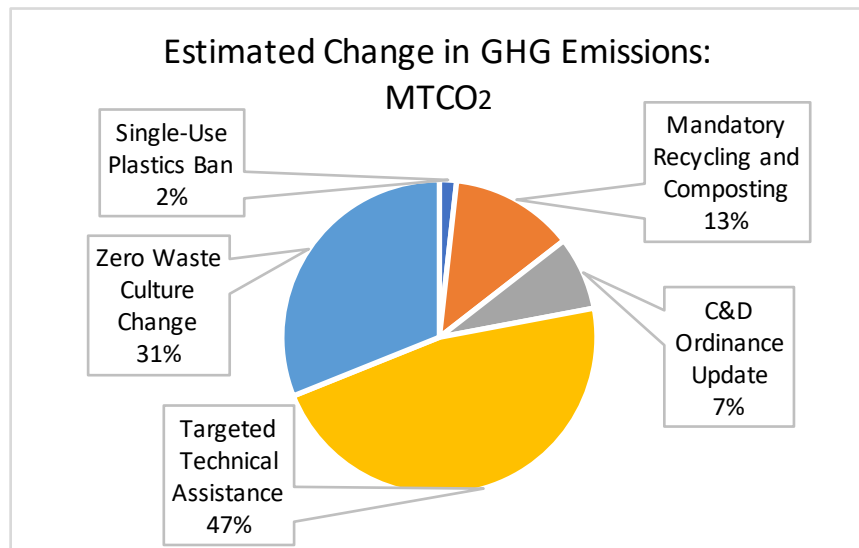
Model does not include textiles

Model cannot model mixed organics source reduction

Model cannot model source reduction for these categories

Strategy Recommendation	Estimated Change in GHG Emissions MTCO ₂
Single-Use Plastics Ban	1,000
Mandatory Recycling and Composting	7,250
C&D Ordinance Update	4,300
Targeted Technical Assistance	26,700
Zero Waste Culture Change	17,700
Total	56,950

**See WARM model spreadsheets for estimate info



Recommended Zero Waste Strategy	Tons Diverted	GHG Emission Reduction	Anticipated Timeline
Single-Use Plastics Ban	490	1,000	Short - Medium
Mandatory Recycling and Composting	4,050	7,250	Short
C&D Ordinance Update	4,410	4,300	Short
Zero Waste Culture Change	13,680	17,700	Short -Long
Targeted Technical Assistance	15,630	26,700	Medium - Long

*Ordered by tons diverted, smallest to largest. Strategy order for plan TBD.