MATERIAL FLOW DIAGRAM
Fiscal Year 2003
Revised 1/19/03

Market

Private Sector Recycling

Materials Market

Mulch Users

Compost

Market

Waste-to-Energy Resource Recovery Facility (Operated by Covanta, Inc.)

Waste-to-Energy Facility

County Composting Facility

Solid Waste Transfer Station

County Recycling Center (Drop-Off and MRF)

MSW Export (No Construction or Demo. Debris)

Backyard: Composting & Grasscycling

[Flowstream Diagram]

KEY:
1. Calculated by netting measured collection from estimated yard waste generation.
2, 8. Audited or otherwise documented beginning with FY00 tons, (est. in past).

Data is from State-certified County truck scales, County-owned.

Data is from State-certified truck scales, privately operated under contract to County.

Totals:
Total Waste Generation (TWG) = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 = 1,246,256
Total MSW Generation (above without nonprocessibles) = 1,185,297

Stream No. Material Source(s) of Data Total (tons/yr)
1 Yard Waste Source Reduction Calculated w/ estimates & measurements 93,592
2 Recycled via non-County Facil. Hauler, Processor: Business & Self-Hauler 142,263
3 County Rec. Materials Sales County TS & MRF Scales, Outbd. 93,682
4 Mulch Loaded Out From TS County Trans. Stn. Scale Records 14,563
5 Non-Processibles Recycled County TS Scale Out Records 2,814
6 Non-Processibles Landfilled County Trans. Stn. & Covanta Scale Records 58,145
7 Loaded on Rail Covanta Scales 618,829
8 Waste Disposed Out of County Audited 6-Mo. Hauler Reports 141,190
9 All Incoming Leaves and Grass Compost Facility Scale Records 81,178
10 Composting Residue to RRF Covanta Scale Records 5,016
11 Ferrous recovered at RRF Covanta Scale Records 19,504
12 Ash Loaded to AAR Covanta Scale Records -
13 AAR outgoing other than metal AAR Scale Reports -
14 Metals (Fe, Cu, Brass, Cores) AAR Scale Reports -
15 All ash not recycled Covanta Scale Records 180,205

Residential Per Capital Waste Generation Rate:
Population of County at Mid-Point of Study Period 918,000

Total Residential Waste Inclusive of Nonprocessibles 628,697
Residential MRA Waste Generation (without nonprocessibles) 60,370

Nonresidential Per-Employee Waste Generation Rate:
Employment at Mid-Point of Study Period 569,000

Total Nonresidential Waste Generation 617,559
Nonresidential MRA Waste Generation (without nonprocessibles) 582,928

Recycling Rate Calculations:

County Recycling Rate \(\frac{(1 + 2 + 3 + 4 + 9 + 10 + 11 + 14)}{(TWG - 5 - 6)}\) = 435,168 1,185,257 37.00%

State Recycling Rate \(\frac{(2 + 3 + 4 + 9 + 10 + 11 + 13 + 14)}{(TWG - 1 - 5 - 6)}\) = 339,492 1,085,623 31.27%

State Recycling & Reduction Rate \(\frac{(2 + 3 + 4 + 9 + 10 + 11 + 13 + 14)}{(TWG - 1 - 5 - 6 + 5.0\%)}\) = 339,492 1,085,623 36.27%

EPA Recycling Rate \(\frac{2 + 3 + 4}{TWG - 1 - 5 - 6 + 5.0\%}\) = 339,492 1,085,623 31.27%

*For State and EPA methods, numerator and denominator exclude motor oil & computers.
Flowstreams 10 through 15 are needed only for various recycling rate calculations.
Nonprocessibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.