# NM Recycling Coalition/Organics Recycling Organization
# Composting Mixture Calculation Worksheet

JS Glass, City of Albuquerque, April 2005

***Step 1. Fill in the table below for your materials. (You can copy from the "Materials" sheet.)***

| | | *(Enter either or both ->)* | | Total Weight Basis | | Dry Weight Basis | |
|---|---|---|---|---|---|---|---|
| **Material** | **BD (lb/yd3)** | **%Solids** | **%Moisture** | **%Carbon** | **%Nitrogen** | **%Carbon** | **%Nitrogen** |
| Food waste | 1600 | 21 | 79 | 11.6 | 0.78 | 37.5 | 2.50 |
| In house GW | 550 | 76 | 24 | 30.5 | 0.57 | 40.0 | 0.75 |
| Sierra GW | 444 | 94 | 6 | 46.9 | 0.62 | 50.0 | 0.66 |
| Walatowa GW | 483 | 92 | 8 | 51.3 | 0.37 | 65.5 | 0.40 |

***Step 2. Enter pounds (lbs) below for each material in your proposed mixture, and ...***

| **Material** | **lbs** | **lb Solids** | **lb Water** | **lb Carbon** | **lb Nitrogen** | **yd3** |
|---|---|---|---|---|---|---|
| Food waste | 307000 | 65391 | 241609 | 35612 | 2394.6 | 191.9 |
| In house GW | 100000 | 76000 | 24000 | 30500 | 570.0 | 181.8 |
| Sierra GW | 30000 | 28200 | 1800 | 14100 | 186.1 | 67.6 |
| Walatowa GW | 30000 | 27600 | 2400 | 18078 | 111.0 | 62.1 |
| **Totals** | **467000** | **197191** | **269809** | **98290** | **3261.7** | **503** |

Repeat Steps 2 and 3 until indicators for Your Mix are within optimum ranges. Use calculated material volumes (yd3) from Step 2 to build your compost pile.

***Step 3. ... compare calculated performance indicator values with optimums.***

| **Indicator** | **Formula (from Totals row above)** | **Your Mix** | **Optimum** | **Advice** |
|---|---|---|---|---|
| C:N | lb Carbon / lb Nitrogen | 30.1 | 30-60 | Good mix! |
| H20:TVS | lb Water / lb Carbon | 2.7 | 1.5-2.5 | More C or less wet |
| BD | (lb Solids+lb Water) / yd3 | 927.7 | 850-1000 | Good mix! |
| %Solids | lb Solids / (lb Solids+lb Water) x 100 | 42.2 | 40-60 | Good mix! |