US Composting Council

• Purpose
  – Bringing people together to share information and advocate for the advancement of organics management and the compost manufacturing industry.

• Trade Association incorporated in 1990

• Around 800 members
  – Majority are company/organization memberships
  – Represent compost manufacturers, suppliers, consultants, policy makers, composting supporters
Composting Council Research & Education Foundation (CCREF)

• Purpose
  – Advance composting technologies, practices, and beneficial uses that support resource conservation and economic and environmental sustainability

• 501(c)3 non-profit providing charitable tax benefits to those that donate to its research and projects.

• Recent projects include:
  – Compostable Plastics Toolkit
  – Curb to Compost Toolkit
CCREF – Compostable Plastics Toolkit

http://cptoolkit.org

“This toolkit is designed to help you determine if a compostable plastics program is appropriate for your organization and to guide you in properly managing your compostable plastics.”
Organics Management in the US

• One of the fastest growing segments of the recycling stream
• Over 4,900 composting facilities in the US
• Many more collection programs
• Most handle yard debris
BioCycle Nationwide Survey 2012

Number of U.S. residential food waste collection programs by state

California: 62
Colorado: 4
Illinois: 1
Iowa: 2
Kentucky: 1
Maryland: 2
Massachusetts: 4
Michigan: 2
Minnesota: 26
New Jersey: 1
New York: 2
Ohio: 4
Oregon: 6
Pennsylvania: 1
Texas: 2
Vermont: 1
Washington: 2
Wisconsin: 2

San Francisco: Goals, Zero Waste Policy, & Changing the Rules

- California AB 939 50% mandate
- 75% landfill diversion by 2010
- Zero Waste by 2020
- Bans polystyrene take-out containers
- Requires retail bags to be compostable plastic, recyclable paper, or reusable
- Bans use of city funds to purchase single-serving bottled water
- Will not give a street closure permit for events unless composting collection is in place
- Extended producer responsibility (EPR) resolution
Seattle: composting collection everywhere
Seattle: Compostable Food Service Ware
# Biodegradable Products Institute

Biodegradable Products Institute

Certified Products Catalog

4597 Products listed as of Thursday, September 18, 2014

About the BPI | Help

---

### Foodservice

Disposable food serviceware including plates, containers, cups, lids, straws and cutlery. These products are used to facilitate food-waste composting. By replacing plastic products with compostable substitutes, foodservice operations can compost large quantities of predominantly organic trash.

### Result

<table>
<thead>
<tr>
<th>Asean</th>
<th>16540 SW 72nd Ave #7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Portland, OR 97224</td>
</tr>
<tr>
<td></td>
<td>F: 503-295-4978</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.stalkmarketproducts.com">http://www.stalkmarketproducts.com</a></td>
</tr>
</tbody>
</table>

Asean Corporation produces a line of BPI approved, premium high performance compostable products represented by three brands. “Stalkmarket” molded sugarcane fiber plates, bowls, and containers. “Jaya” biopolymer plant sugar PLA cold cups, lids and straws. “PLA Plus” biopolymer degradable coffee cups and straws.
Yard trim and food waste disposed and recovered, 1998-2012

- Yard trimmings disposed
- Yard trimmings recovered
- Food scraps disposed
- Food scraps recovered
<table>
<thead>
<tr>
<th>State</th>
<th>Total Organics Diverted To Composting (tons)</th>
<th>Diverted Organics As Percent Of Total MSW¹</th>
<th>Number Of Facilities By Volume Received [tons per year]</th>
<th>All Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>227,044</td>
<td>8.6</td>
<td>19 6 3</td>
<td>28</td>
</tr>
<tr>
<td>California</td>
<td>5,900,000</td>
<td>8.6</td>
<td>50 44 68</td>
<td>162</td>
</tr>
<tr>
<td>Colorado</td>
<td>263,549</td>
<td>3.2</td>
<td>10 11 9</td>
<td>30</td>
</tr>
<tr>
<td>Connecticut</td>
<td>270,163</td>
<td>8.4</td>
<td>82 45 12</td>
<td>139</td>
</tr>
<tr>
<td>Delaware</td>
<td>66,111</td>
<td>6.5</td>
<td>1 0 2</td>
<td>3</td>
</tr>
<tr>
<td>Florida</td>
<td>1,450,757</td>
<td>5.0</td>
<td>131 58 40</td>
<td>229</td>
</tr>
<tr>
<td>Indiana</td>
<td>272,364</td>
<td>3.4</td>
<td>87 8 3</td>
<td>98</td>
</tr>
<tr>
<td>Iowa</td>
<td>1,281,201</td>
<td>47.0</td>
<td>103 3 6</td>
<td>112</td>
</tr>
<tr>
<td>Kansas</td>
<td>191,596</td>
<td>5.9</td>
<td>141 5 2</td>
<td>148</td>
</tr>
<tr>
<td>Kentucky</td>
<td>na</td>
<td>na</td>
<td>40 1 0</td>
<td>41</td>
</tr>
<tr>
<td>Maine</td>
<td>27,944</td>
<td>1.6</td>
<td>82 3 2</td>
<td>87</td>
</tr>
<tr>
<td>Maryland</td>
<td>941,261</td>
<td>13.8</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>660,000</td>
<td>9.0</td>
<td>130 18 3</td>
<td>151</td>
</tr>
<tr>
<td>Minnesota</td>
<td>249,949</td>
<td>4.4</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>Mississippi</td>
<td>13,414</td>
<td>0.2</td>
<td>13 3 0</td>
<td>16</td>
</tr>
<tr>
<td>Missouri</td>
<td>530,000</td>
<td>na</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>Montana</td>
<td>52,764</td>
<td>3.3</td>
<td>40 4 2</td>
<td>46</td>
</tr>
<tr>
<td>Nebraska</td>
<td>150,000</td>
<td>na</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>na</td>
<td>na</td>
<td>7 2 0</td>
<td>9</td>
</tr>
<tr>
<td>New Jersey</td>
<td>535,176</td>
<td>4.2</td>
<td>32 6 0</td>
<td>38</td>
</tr>
<tr>
<td>New Mexico</td>
<td>74,021</td>
<td>4.0</td>
<td>459 22 9</td>
<td>490</td>
</tr>
<tr>
<td>New York</td>
<td>1,006,706</td>
<td>5.5</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>North Dakota</td>
<td>na</td>
<td>na</td>
<td>47 4 0</td>
<td>51</td>
</tr>
<tr>
<td>Ohio</td>
<td>987,694</td>
<td>9.2</td>
<td>279 47 10</td>
<td>336</td>
</tr>
<tr>
<td>Oregon</td>
<td>224,275</td>
<td>9.2</td>
<td>20 23 11</td>
<td>54</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>857,739</td>
<td>9.5</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>111,000</td>
<td>14.0</td>
<td>20 5 2</td>
<td>27</td>
</tr>
<tr>
<td>South Carolina</td>
<td>246,624</td>
<td>5.5</td>
<td>99 22 5</td>
<td>126</td>
</tr>
<tr>
<td>South Dakota</td>
<td>73,216</td>
<td>11.4</td>
<td>144 2 1</td>
<td>147</td>
</tr>
<tr>
<td>Tennessee</td>
<td>500,000</td>
<td>1.5</td>
<td>10 1 1</td>
<td>12</td>
</tr>
<tr>
<td>Texas</td>
<td>381,827</td>
<td>1.8</td>
<td>na na na</td>
<td>na</td>
</tr>
<tr>
<td>Utah</td>
<td>221,374</td>
<td>10.6</td>
<td>10 10 4</td>
<td>24</td>
</tr>
<tr>
<td>Vermont</td>
<td>52,411</td>
<td>9.0</td>
<td>11 5 0</td>
<td>16</td>
</tr>
<tr>
<td>Virginia</td>
<td>184,702</td>
<td>1.5</td>
<td>7 7 4</td>
<td>18</td>
</tr>
<tr>
<td>Washington</td>
<td>1,211,805</td>
<td>13.7</td>
<td>39 12 14</td>
<td>65</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>215,000</td>
<td>5.0</td>
<td>231 9 0</td>
<td>240</td>
</tr>
<tr>
<td>Wyoming</td>
<td>na</td>
<td>na</td>
<td>10 3 5</td>
<td>18</td>
</tr>
<tr>
<td>All Reporting States</td>
<td>19,431,687</td>
<td>7.8</td>
<td>2,354 713 218</td>
<td>3,285</td>
</tr>
</tbody>
</table>

Composting Facilities by Type

- Yard Trimmings: 70%
- On-Site Farm/Ag: 8%
- On-Site Institution: 7%
- Mixed Organics: 2%
- Food Scraps: 7%
- Biosolids: 5%
- Other: 1%

4,914 total compost sites reported.
<table>
<thead>
<tr>
<th>State</th>
<th>Grants</th>
<th>Loans</th>
<th>Technical Assistance</th>
<th>Diversion Mandates</th>
<th>Disposal Bans</th>
<th>Outreach &amp; Education</th>
<th>Operator Training Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Arizona</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Arkansas</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>California</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Colorado</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Connecticut</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Delaware</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Florida</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Idaho</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Indiana</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Iowa</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Kansas</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Kentucky</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Maine</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Maryland</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Montana</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>New Jersey</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>New York</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>North Dakota</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ohio</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oregon</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>South Dakota</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Utah</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Vermont</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Virginia</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Washington</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Wyoming</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

States Reporting Programs: (total of 39 states responding) 14 7 34 8 18 31 15

Challenges to Expanding Composting

- Lack of policies prioritizing composting and a diversified infrastructure
- Perception that starting composting is too costly
- Lack of collection infrastructure
- Lack of composting capacity
- Siting difficulties
- Lack of regs/permitting to facilitate responsible compost operations
- Poorly operated compost facilities that ultimately give a bad name to composting
- Contaminants (e.g., persistent herbicides)
- Zoning regulations
- Competition with cheap disposal
- “Free” unlimited set-out of residential trash
- Landfill and incinerator industry vested interests
- Lack of training programs for onsite composting
- Lack of leadership and political will
State Laws Targeting Food Waste Generators

Massachusetts:
- Targets food waste generators who generate 1 ton a week or more of food or vegetative material.
- These materials are banned from disposal effective October 1, 2014.

Vermont:
- Law gradually expands from large food generators (>104 tons per year) in effect July 1, 2014, to every generator, including households, by July 1, 2020.
- The law has interim targets in 2015 (>52 tons per year), 2016 (>26 tons per year), and in 2017 (>18 tons per year).
- Only generators within 20 miles of a certified organics management facility with available capacity and willingness to accept food residuals are covered.
- Requires trash haulers offering curbside services to provide services for leaf and yard debris by 2016 and for food scraps by 2017.
- Residences are required to source separate leaf and yard debris by July 1, 2016, and food scraps by July 1, 2020.
Connecticut:

- Requires certain large entities (commercial food wholesalers/distributors, industrial food manufacturers/processers, supermarkets, and resorts/conference centers) generating **104 tons or more per year** to divert food waste by January 1, 2014, to composting if a permitted composting facility exists within 20 miles.
- By January 1, 2020, the law applies to entities generating 52 tons or more per year.

Rhode Island:

- Targets entities generating 104 or more tons per year by January 1, 2016.
- Each covered entity shall ensure that organic waste materials are recycled at an authorized composting facility, or anaerobic digestion facility or by another authorized recycling method if entity is not more than 15 miles from an authorized composting facility or anaerobic digestion facility with available capacity to accept such material.
- Waiver may be allowed if tipping fees are not competitive.
California has Pending Legislation
California’s organic waste recycling bill

AB 1826 is waiting for Gov.’s signature

- By April 1, 2016, a business that generates 8 cubic yards or more of organic waste per week shall arrange for organic waste recycling services.
- By January 1, 2017, a business that generates 4 cubic yards or more of organic waste per week shall arrange for organic waste recycling services.
- By January 1, 2019, a business that generates 4 cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.
- By January 1, 2020, if the department determines that statewide disposal of organic waste has not been reduced to 50% of the level of disposal during 2014, a business that generates 2 cubic yards or more per week of commercial solid waste shall arrange for organic waste recycling services.
- By January 1, 2016, each jurisdiction shall implement an organic waste recycling program designed specifically to divert organic waste generated by businesses subject by the new law.
- By August 1, 2017, each jurisdiction shall report on its progress in implementing its organic waste recycling program.
Opportunities to Expand Composting

- Diverse composting infrastructure
- Outreach and education
- Link composting to:
  - Soil health
  - Watershed protection
  - Local food production
  - Jobs
- Market development
- Professionalizing & protecting the industry
US EPA Hierarchy of Food Scrap Recovery

Food Recovery Hierarchy

Source Reduction
Reduce the volume of surplus food generated

Feed Hungry People
Donate extra food to food banks, soup kitchens and shelters

Feed Animals
Divert food scraps to animal feed

Industrial Uses
Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

Composting
Create a nutrient-rich soil amendment

Landfill/Incineration
Last resort to disposal
Revised Hierarchy of Food Scrap Recovery

Hierarchy For Reducing & Recycling Food Scraps And Other Organic Discards

- Source Reduction
- Edible Food Rescue
- Residential Backyard Composting
- Small-scale, Decentralized Composting
- Centralized Composting or Anaerobic Digestion
- Mechanical Biological Mixed Waste Treatment
- Landfill & Incinerator

Source: Institute for Local Self-Reliance, 2014
“...decentralized composting processes can reduce the carbon footprint of collection and transportation while consuming organics in more localized situations that do not require large organized collection programs.”

“The Department recognizes that, in addition to helping the City achieve its Zero Waste goals, composting also addresses the community’s interest in enriching the region’s soil, strengthening sustainable food production and completing the food cycle.”

What is community-based composting?

Community composting keeps the process and product as local as possible while engaging the community through participation and education:

- Community gardens
- Farms
- Schools
- Drop-off networks
- Collection entrepreneurs

Compost builds community! (Photo: NYC Compost Project)

Download the free Growing Local Fertility: A Guide to Community Composting at www.ilsr.org/growing-local-fertility
Collection Entrepreneurs

Philly Compost

Neighborhood

Contact for Pricing: jen@phillycompost.com 215-880-0465

To maintain the Compost Coop as an affordable residential composting option, Philly Compost is now providing organics collection service! Pick-ups will be by bike and processed right in the neighborhood. Support your local economy while reducing your carbon footprint!

Affordable Organics Collection

All organics accepted
A generous helping of free compost each year
Clean bins at each collection
Waste diversion reports available
Smallest carbon footprint in commercial composting
Local, Woman Owned Small Business


City Sprouts

Institute for Local Self-Reliance
**Composting method used (check all that apply):**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static pile</td>
<td>31% (8)</td>
<td></td>
</tr>
<tr>
<td>Windrow</td>
<td>50% (13)</td>
<td></td>
</tr>
<tr>
<td>Forced aeration</td>
<td>27% (7)</td>
<td></td>
</tr>
<tr>
<td>In-vessel</td>
<td>35% (9)</td>
<td></td>
</tr>
<tr>
<td>Vermicomposting</td>
<td>42% (11)</td>
<td></td>
</tr>
<tr>
<td>Bin system</td>
<td>42% (11)</td>
<td></td>
</tr>
<tr>
<td>Other (Describe)</td>
<td>19% (5)</td>
<td></td>
</tr>
</tbody>
</table>

* 26 total responses, 84% of submissions

Earth Tub in-vessel compost system at Philly Compost (Philadelphia)

Building a windrow by hand at Red Hook Community Farm (Brooklyn, NY)
Urban Farms

Red Hook Community Farm

Growing Power

ECO City Farms
Drop-off Network

Neighborhood Compost Map

Finding a Composting Site in your Neighborhood
Gardeners and compost fanatics: share your experience and your bins! You know that the best way to keep organics out of the waste stream is to compost in your own backyard.

The reasons are many:
- No emissions from transporting organics
- Low tech
- Least expensive

"The map is such an awesome resource!" - uncollected email, Philadelphia resident

By placing yourself on the Philly Compost Map, you’re not only showing overwhelming interest in composting, you’ll also help us quantify reduced carbon and methane emissions for our region. The more composters, the better for the planet!

Compost sites on the Map are color coded:
- Shared community bins are purple. We ask donors to check with the Site Host before contributing. If your site can accept more organics, or already has more than the household contributing to it, we ask you to share it.
- Private sites are red. We ask that everyone check with the site contact before visiting. If your site cannot handle more organics, or is in a hard-to-access space, we suggest you list it as a private site.
- Yellow sites are folks that would love to find a shared site nearby. If your compost site is near one of these, please contact that neighbor and share your bin!
- Commercial sites are green. We’re coming soon to Germantown!
- City sites are blue.

To add your site to the map:
- When viewing the map, click on the Edit button along the left side bar.
  If you don’t have one, and don’t want to create one, send an email to us with the location of your compost site.
- After you click the Edit button, you’ll see options along the top left of the map itself.
- If you are clicked onto a point, you will be directed to edit just that point. To create a new point, make sure your cursor is not clicked on anything.
- Click on the placemark icon (looks like a tear drop) and position it where you’d like.
- Or ... while you have the map visible, enter a street address in the map search bar, and select Save to My Map, then to Philly Compost.
- Change the drop color to red (for private) or purple (for shared) site, and add any other descriptive text to the text box.
- Click the Done button when you are finished (over to the left, where the Edit button was).
New York City
Close the Loop!
North East Kingdom, VT

Rural Regions
Micro Programs
Residential Drop Offs
On-Site Composting

Food Scrap Dense Regions
Dedicated Collection Routes
On-Farm Composters
Residential Drop Offs
Residential Food Scrap Drop-Off

Come ask me about the Free Compost Collection!
Ferrisburgh Central School Pilot (Vermont)
Designing a Bin System for Hot Composting
Ideas for supporting community-scale composting

- Local and state policies to support diversified infrastructure
- Access to land
- Funding support
- Technical assistance and tools for locally based systems
- Development of model locally based systems
- Master Composting Training Programs

ILSR piloting a national model: Neighborhood Soil Rebuilders. Contact me for replication information.
Opportunities to Expand Composting

- Diverse composting infrastructure
- Outreach and education
- Link composting to:
  - Soil health
  - Watershed protection
  - Local food production
  - Jobs
- Market development
- Professionalizing & protecting the industry
Managing soil organic matter is the key to air and water quality.

Cover crops, reduced tillage, prescribed grazing, and manure management improve soil health, which leads to water holding capacity, soil structure, infiltration, and nutrients. This results in fewer pollutants, less dust, air quality, water quality productivity, less sediment, drought & disease resistance.

Source: “Manage for Soil Carbon” web page, Natural Resources Conservation Service, US Dept. of Agriculture
Building Healthy Soils with Compost to Protect Watersheds
May 2013
By Bobby Bell and Brenda Platt

Summary

Healthy soils are essential for protecting local watersheds. In many accounting and agricultural sectors, compost and vegetation provide important functions to reduce water runoff, reduce sediment, and improve soil quality. Compost and vegetation can improve water quality in waterbodies, protect wetlands and sensitive habitats, and reduce erosion. Vegetative streets and natural areas are effective in reducing runoff, improving water quality, and reducing stormwater impacts.

Credit: City of Portland, Oregon Bureau of Environmental Services

www.ilsr.org

Denbow, www.denbow.com

Vegetated Walls (Filtrexx)
Organics Diversion: Core Climate Protection Strategy

- Prevents landfill methane emissions
- Stores carbon
- Improves soils ability to store carbon
- Substitutes for energy-intensive fertilizers, pesticides, fungicides
- Improves plant growth, and thus carbon sequestration
- Reduces energy use for irrigation

Credit: Marin Carbon Project
Composting = Local Jobs

- Organics do not ship well
- Composting is small-scale
- Jobs are local
- Compost products are used locally
- Dollars circulate within local economies
- Local = good for local economies
- Composting linked to urban food production
- Composting diversifies farm products and saves money

On a per-ton basis, composting sustains 2 x more jobs than landfills and 4 x more than MD’s three trash incinerators

Ned Foley, Two Particular Acres
### Job Creation: Composting vs. Disposal

<table>
<thead>
<tr>
<th>Type of Operation</th>
<th>Jobs/10,000 TPY</th>
<th>Jobs/$10 million capital investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composting Facilities</td>
<td>4.1</td>
<td>21.4</td>
</tr>
<tr>
<td>Compost Use</td>
<td>6.2</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total Composting</strong></td>
<td><strong>10.3</strong></td>
<td></td>
</tr>
<tr>
<td>Disposal Facilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landfilling</td>
<td>2.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Burning (with energy recovery)</td>
<td>1.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

*On a per-ton basis, composting production and use sustain almost 5 times more jobs than landfilling and 9 times more than burning.*

$ converted to constant 2010$

TPY = tons per year (for composting, tons represent original material, not the amount of compost produced)

## Potential New Jobs by Composting 1 Million Tons of Organics Disposed

<table>
<thead>
<tr>
<th>Option</th>
<th>FTE Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning</td>
<td>120</td>
</tr>
<tr>
<td>Landfilling</td>
<td>220</td>
</tr>
<tr>
<td>Composting</td>
<td>740</td>
</tr>
<tr>
<td>Compost Use</td>
<td>620</td>
</tr>
<tr>
<td><strong>Total Composting</strong></td>
<td><strong>1,360</strong></td>
</tr>
</tbody>
</table>

FTE = full-time equivalent


MCS Inc. worker installing growing media made from compost on green roof. [www.mcsnjinc.com](http://www.mcsnjinc.com)
Opportunities to Expand Composting

- Diverse composting infrastructure
- Outreach and education
- Link composting to:
  - Soil health
  - Watershed protection
  - Local food production
  - Jobs
- Market development
- Professionalizing & protecting industry
Montgomery County, MD
RainScapes Rewards Rebate Program

- BMP for rain gardens: amending soil with compost
- Conservation landscapes: required to have 3-inch layer of compost (incorporated to create a 6-12 inch improved soil layer)
- Property owners offered rebate for low-impact development installations
- US$2,500 max for residential
- US$10,000 max for commercial, multi-family, or institutional
- Replicated in Gaithersburg & Rockville (MD) Over 100 Certified RainScapes Professionals
Leander (TX): All new landscapes (nonresidential and residential) are required to have a minimum of six inches (6”) of soil depth in areas planted with turf grass. This six-inch (6”) minimum soil depth will consist of 75% soil blended with 25% compost.

Greeley (CO): anyone installing a new lawn must use 4 cubic yards of compost per 1,000 square feet of area, incorporated at a depth of 6 inches.

King Co. (WA): Clearing/grading regs: Replaced topsoil must have an organic matter content of 5% dry weight for turf applications and 10% for planting beds.

Seattle: New construction sites: 20-25% compost by volume in a topsoil mix for turf (5% organic matter) and 35-40% compost by volume in a topsoil mix in planting beds (10% organic matter).
State Highway Administration – Compost and Compost–Based Products – Specification


Requires SHA, by December 30, 2014, to establish a specification for the acquisition and use of compost and compost-based products for:

(1) erosion and sediment control; and
(2) postconstruction stormwater management.

Filter Sock (Filtrexx.com)
Maryland HB878 & SB814 cont.

- Make recommendations to maximize use of compost
- Review its existing specifications and identify compost-based equivalents to add to the existing specifications, including:
  - Compost blankets for soil stabilization mats and other types of compost erosion control blankets,
  - Compost socks for slope interruptions, inlet protection, and sediment control,
  - Compost in biofiltration soil mix, and
  - Compost in biofiltration swales
- Report to the General Assembly by December 1, 2015
Opportunities to Expand Composting

- Diverse composting infrastructure
- Outreach and education
- Link composting to:
  - Soil health
  - Watershed protection
  - Local food production
  - Jobs
- Market development
- Professionalizing & protecting industry
2013 survey: Americans open to composting

National Waste & Recycling Association survey finds most Americans would compost if it was more convenient in their community

- 77% of Americans say they understand the importance of recovering food/yard organic material instead of disposing it with household waste
- 68% who do not compost say they would be willing to separate food waste if their community implemented a program requiring them to do so
- 79% of Americans with gardens would be willing to use gardening fertilizers, mulch and other products made from food waste compost

- 16% say they compost at home, 9% in their community, 4% in some other way = 72% of Americans do not compost

Brenda Platt
Institute for Local Self-Reliance
bplatt@ilsr.org

For model policies, please visit:
http://www.ilsr.org/initiatives/composting/
and click on “Rules”