## FY 2016 Managing Wastes PROGRAM WORK TEAM ANNUAL REPORT

## 1. Full name of your Program Work Team (PWT):

Managing Wastes: Composting and Land Application \*Jean Bonhotal, Director (jb29@cornell.edu) Cornell Waste Management Institute Soil and Crop Sciences Section School of Integrative Plant Science 817 Bradfield Hall Ithaca, NY 14853

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## 2. Please identify your PWT's greatest accomplishments over the past year.

The Managing Wastes PWT is represented by a broad band of interested stakeholders, including livestock farmers, compost producers, community composters and homeowners, government agencies, other universities and colleges, NGOs, private consultants, waste management companies, Cornell Cooperative Extension educators and Cornell faculty, staff and students from a number of departments. This broad band of interested parties works with CWMI and the Managing Wastes PWT to identify needs in order to continue to address waste related issues.

Effectively managing and reducing waste can turn unwanted waste products into resources while avoiding disposal costs and reducing demand for landfill space. There is demand for research and information on organic residual management. Many of our stakeholders have interest in the use of organic residuals as value-added products for use in agriculture, horticulture and for energy production and erosion control, as well as homes, schools and communities.

In early January, 2016, the Managing Wastes PWT participated in the 2016 Long Island Agriculture Forum by presenting a three hour science-based workshop with 35 attendees on soil principles and properties, including the concepts and benefits of best management practices that improve soil health. Composting is one of the most environmentally appropriate agronomic practices to advance on-farm manure, nutrient, and pesticide management as the process of composting manure, bedding, and animal mortality sequesters leachable nutrients, degrades residual pesticides, reduces pathogens and eliminates compost as a pathway for weed transmission. The resulting product, when properly composted and field applied provides a wealth of benefits including increasing soil health through organic matter and micro biota additions, improving and protecting surface and ground water quality by helping to sequester nutrient and pesticides, reducing pathogen loads and minimizing the dependence on pesticides. This forum connected small, medium and large farm operators with extension and regulatory personnel to develop a working group that will continue to support environmentally friendly forms of waste management on Long Island.

A second event grew from repeated inquiries from stakeholders across the state, including NYSDEC and Cortland County Soil and Water Conservation District to help New Yorkers reduce, reuse and recycle food scraps. Fifty-eight people participated in a 2-day workshop and tour held in Cortland and Tompkins Counties. The first day consisted of a workshop in which the basics of composting and what makes a good compost were reviewed. Uses of the final product were discussed as well as an update on permitting and state regulations. In the afternoon, a panel of local community composters from secondary schools and other community sites discussed how they got started, tips and tricks as well as hurdles and other issues. The following day, attendees boarded a bus and toured four community compost sites.

Targeted research and programing, as well as assistance in policy development on many waste topics including recycling, composting, digestion, waste reduction and agricultural waste management by CWMI all come from these type of events. The Managing Wastes PWT allows CWMI the opportunity to fine-tune those targets. CWMI continues to work with NYSDEC and many others to help implement organic waste reduction and management in NYS. CWMI's Compost Facility Map (http://compost.css.cornell.edu/maps.html) helps facilitate the movement of organic feedstock to compost facilities; 12 new facilities are managing more organics and 7 more schools (including colleges and universities) are managing organics either on-site or diverting to a large scale or municipal facility. Businesses that transport pre and post-consumer waste from small restaurants to large compost facilities are cropping up in NY as well and are being listed on the map.

Our continued interactions with community stakeholders through gardening events and discussion forums, urban farming workshops and responding to information requests by email and phone have clearly indicated that our "Healthy Soils, Healthy Communities" and soil quality resources (<u>http://cwmi.css.cornell.edu/soilquality.htm</u>) are in demand and being used frequently. Work continues to help gardeners, farmers, and others make informed decisions about contamination in soils and use best management practices for healthy and safe gardening.

CWMI collaborates with other Cornell departments to play a major role, particularly regarding characterization and use of wastes in agriculture and communities. CWMI delivers research-based knowledge around the world, and shares key information via a 5,000 person e-mail list. All resource materials and videos are accessible through eCommons, Cornell's digital repository: https://ecommons.cornell.edu/handle/1813/2146. The CWMI website, Blog and eCommons received over 620,000 hits. Through conferences, workshops and trainings, CWMI reached 1,200 people with a total of 3,670 contact hours. CWMI's reach continues to expand as we worked with Extension educators from 42 counties and across the nation as well.