

FY 2015 PROGRAM WORK TEAM ANNUAL REPORT

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

Managing Wastes: Composting and Land Application

2. Please list names, affiliations and e-mail addresses of the PWT Co-Chairs: (With an asterisk [*], please indicate the co-chair responsible for finalizing this report.)

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Activities, Accomplishments, Outcomes and Impacts:

The Managing Wastes PWT had a very active year, with four different forums where research and implementation gaps were identified and information transferred. This 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. Government regulators from many counties serve on the PWT and work with CWMI, to answer questions that affect regulation.

One of the important roles CWMI plays is convening people interested in waste-related topics, bringing regulators, educators and stakeholders together to solve waste-related problems. For

several years, the focus had been primarily on agricultural wastes, but in the last couple of years, our stakeholders indicated interest in re-energizing our education programs on small to medium scale organics management including community composting. Homeowners, schools, restaurants, businesses and municipalities are all seeking ways to manage their organic residuals either on-site or close to home. CWMI has helped facilitate more on-site composting over the last year by working with various PWT stakeholders in schools, towns and villages across NYS. For example, CWMI, along with New York State Association for Reduction, Reuse and Recycling (NYSAR³) helped to convene the 1st annual NYS Summit on Organics Management in Poughkeepsie, NY, on March 5, 2015. Over 100 people attended the Summit to discuss food waste reduction and community composting. This summit connected small and medium-scale composters throughout NYS and developed a working group that will continue to support existing composting as well as encourage new programs throughout the state.

Three additional events were held to address ways to manage organic residuals. The first event took place in White Plains, NY, where CWMI convened a group of landscapers, homeowners, government environmental personnel and non-profits to discuss leaf management. Many communities in NYS currently rake their leaves to the curb where they are picked up and transported to composting/disposal sites, sometimes out of state. Leaving this excellent source of organic matter on the lawn and mulch mowing it into the soil can certainly have benefits to the soil, but there are still questions about whether or not the practice will affect tick habitat and if it is environmentally sound in terms of carbon footprint, leachate, etc. Stakeholders at this meeting identified gaps in the research that CWMI and PWT members can work on.

The second and third events grew from repeated inquiries from stakeholders across the state, including NYSDEC to work on a large-scale plan for NY to reduce, reuse and recycle food scraps. CWMI was invited to participate in a Food Scraps forum held in Albany in June where over 65 attendees gave input to help the Department advance organics waste diversion within the State, specifically wasted edible food and food scraps. Many challenges were raised during the forum regarding diverting wasted edible food and food scraps from disposal. Chief among these is the lack of facilities that accept and process food scraps. Many other challenges mentioned contribute to this lack of facilities. These include a low rate of return on products generated through food scraps recycling – (mainly energy, soil amendments), immature markets for these products, a lack of incentives (financial, legislative and policy), high transportation costs, and low disposal costs in much of the state. An additional challenge affecting organics diversion is a lack of outreach and education. These challenges influence the ability of food banks to acquire all the available wasted edible food and hinders the ability of generators to choose and implement appropriate recycling strategies for their food scraps. To that end, the third event was an invitation to Jean Bonhotal (CWMI director) to attend “Capital for a Day” in Rochester, NY, on July 9th, 2015. The Governor’s cabinet met with community members, business leaders and partners in government to identify opportunities to combat poverty, strengthen the economy and improve the community’s infrastructure.

CWMI conducts targeted research, provides programming and assists in policy development on many waste topics including recycling, composting, digestion, waste reduction and agriculture

waste management. All of the Managing Organic Residuals PWT events held/attended in 2015 have allowed 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. As indicated in the March Summit, building additional infrastructure to manage more organics is a priority. CWMI's Compost Facility Map (<http://compost.css.cornell.edu/maps.html>) helps facilitate the movement of organic feedstock to compost facilities; over 10 new facilities are managing more organics and thirteen 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 (<http://cwmi.css.cornell.edu/soilquality.htm>) 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.

Managing mortalities through composting continues to be a focal point for research and outreach. With the 2014-2015 HPAI outbreak, CWMI staff and resources were called upon to help with disposal of the more than 42.1 million chickens and 7.5 million turkeys that were affected and depopulated. Through the use of CWMI's fact sheets and posters on composting poultry mortalities, more than half of affected poultry were safely disposed through composting.

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 and the CWMI website (cwmi.css.cornell.edu). 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.