

Position Title: CE Area Organic Materials Management and Agri-Food System Advisor

Position: The CE Advisor is responsible for developing and implementing interdisciplinary research and extension programs that combine sustainable organic waste management with agroecological science. The position will focus on research and extension projects that return nutrients from the organic waste sector back into working landscapes and food system supply chains, while improving the resilience and sustainability of Bay Area food and farming systems. The primary emphasis is to improve organic waste management and increase rural and urban agri-food system resiliency through the application and use of recovered organic materials while reducing the impacts of climate change through better organic waste management.

A graduate degree in agricultural, plant, crop, soil, or environmental science, environmental engineering, or related fields of study is required. Experience in conducting field research in agriculture; planning and implementation of broad, large-scale research and extension programs; an understanding of how public policy impacts agricultural management and producer decision making is preferred.

Justification: The San Francisco Bay Area has been leading efforts in California to recover and recycle organic waste; however, new statewide mandates from SB 1383, the Short-Lived Climate Pollutants Act require additional 75% reduction in organic waste disposal and the rescue of 20% of surplus edible food by 2025. In addition, SB 1383 requires municipalities to purchase large volumes of recovered organic waste products, primarily compost and mulch. To strengthen regional economic and resource sufficiency and sustainability, and meet state climate initiatives and mandates, the need for the rapid generation and dissemination of applied knowledge concerning the recovery and recycling of organic waste material and its use in farming, animal production, and landscaping has intensified. Research-based solutions are urgently needed to make certain that this policy is carried out in a way that protects both the public and the environment, while making the food system more sustainable and climate resilient.

Through this position, ANR will address key issues with a high potential for local, regional, and statewide impact. In a resilient food system, organic waste materials—which are generated at every step in the food supply chain—are converted into valuable agricultural inputs. By conducting research and education that supports 1) food waste reduction, reuse, and recycling, 2) climate-smart agriculture, and 3) healthy soils, this position will support the ANR condition changes of *increasing resilience to climate change, protecting and conserving soil quality, and increasing the ecological sustainability of agriculture and landscapes*.

Extension: This position will provide research-based education to organic waste generators, local policy makers and end users of waste derived products, e.g., compost, animal feed. Key clientele groups include, but are not limited to, municipal environmental service departments, waste hauling services, commercial and residential waste generators, non-profit organizations, food processors and agricultural producers. Extension activities include providing clientele with digital and in-person educational services focused on recovery and reuse of organic waste, capacity building through facilitation of organized networks for food waste recovery and linking urban organic materials producers with rural end users. This position will also provide technical

oversight and development in areas where UCCE has a related programs that can extend information including Master Gardeners, Master Food Preservers, Urban Agriculture, Small Farms, Master Composters, and 4-H Youth Development STEM projects, where appropriate.

Research: Key research areas for this position are the optimization of organic waste management for agricultural production including the use of byproducts as agricultural soil amendments, livestock feed, and/or horticultural media. Additional topics include investigation of appropriate processing technologies in terms of scale, location, and social equity. Through collaborations with social scientists, research activities could also include studying effective public messaging, methods for the measurement of household waste and various associated human behaviors associated with waste disposal and recycling.

ANR Network: Currently, ANR provides limited support to stakeholders working at the nexus of organic waste and agriculture – specifically organic waste generated by urban areas. The extent of ANR’s reach in this area has, in the past, revolved around a recently retired CE Specialist position at UC Riverside. As SB 1383 becomes a reality, ANR can fill an important niche in response to a growing need. This position would provide relevant clientele groups with regionally specific support by linking UC academic assets, urban and rural, including regional climate smart technical assistance providers, Small Farm, Urban Agriculture and Food Systems advisors, as well as Nutrient Management specialist located at UC Davis and soil science faculty located at UC Merced. The position would also be part of network of advisors and specialist working towards the sustainable management of organic waste, including CE Livestock Waste Management Specialist at UC Davis and proposed positions: Area Organic Materials Management Advisor at South Coast REC, and Specialists in Waste Conversion Solutions at UCR and Food Waste at UC Davis.

Network External to ANR: This advisor will collaborate with regional representatives from cities and counties as well as state agency partners from CalRecycle, CDFA and CalEPA. National and state non-profit organizations collaborators include California Compost Coalition, Association of Compost Producers, and the US Composting Council.

Support: The position will be supported by UCCE Santa Clara County which has county funding to cover transportation, supplies, equipment, and will provide field sites and laboratory space.

Other support: Possible funding sources include Valley Water, 11th Hour Foundation, Healthy Soils Program, Specialty Crop Grants, Western SARE, and CalRecycle community composting and organics capacity grants. The growing interest in food waste reduction and organic waste recycling makes external funding highly likely.

Headquarters and Coverage Area: The position will be headquartered in Santa Clara County and serve the Bay Area (Alameda, Contra Costa, San Mateo/San Francisco counties).

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