

2026 UC ANR Cooperative Extension Call for Positions: Area Environmental Horticulture Advisor

Developed and proposed by: This position was developed and proposed by Michelle Leinfelder-Miles, San Joaquin County (SJC) Director, and is supported by Jennifer Heguy and Karmjot Randhawa, Stanislaus and Merced County Directors. This position was ranked #1 by the Environmental Horticulture, Floriculture, Berries, and Nurseries Program Team and #1 by the Master Gardener Program Statewide Director, who contributed to the development of this position description. External stakeholders who support this position include the SJC, Stanislaus, and Merced Agricultural Commissioners; the SJC, Stanislaus, and Merced Farm Bureaus; SJC and Delta Water Quality Coalition; SJC Public Works (financial partner of the SJC Master Gardener Program); Stanislaus County Parks and Recreation; and industry members Generation Growers, Inc. and Devil Mountain Wholesale Nursery.

Position title: Area Environmental Horticulture Advisor serving San Joaquin, Stanislaus, and Merced counties

Headquarter location and coverage area: This position will be headquartered at the SJC Cabral Agricultural Center in Stockton. The Advisor will serve a three-county region that is currently underserved in the disciplines of urban landscapes and ornamental nursery production, where the three-county nursery industry is annually worth \$430 million. These three counties also have active Master Gardener programs, and the Advisor will provide academic oversight for the programs. The SJC Advisor cohort is poised to support and mentor the Area Environmental Horticulture Advisor, who will complement the existing team. There are currently four Farm Advisors (Orchard Systems – Almonds/Pistachios, Vegetable Crops, Viticulture, Delta Crops) and one Community Nutrition and Health Advisor, with a fifth Farm Advisor (Orchard Systems – Walnuts/Cherries) beginning in October 2026. The Area Environmental Horticulture Advisor will serve a significant industry in the region (i.e. nurseries) as well as urban communities.

Position overview, briefly describe: The Advisor will conduct an extension and applied horticultural research program in environmental horticulture, urban landscape management, and ornamental nursery production across the northern San Joaquin Valley, where water conservation, nutrient and pest management, and soil health and greenwaste management are potential avenues for programming. The Advisor will also provide academic oversight and support for the Master Gardener programs in San Joaquin, Stanislaus, and Merced counties. A minimum of a Master's degree in horticulture, urban forestry, arboriculture, or a related field is required at the time of appointment. Experience in horticultural systems, landscape water management, soil health and greenwaste diversion, and/or integrated pest management (IPM) are desired. The Advisor will be administratively supervised by the UCCE San Joaquin County Director, with input from the Stanislaus and Merced County Directors and the Master Gardener Program Statewide Director.

Justification: The Area Environmental Horticulture Advisor will develop an extension and applied research program to improve and protect planted urban landscapes, enhancing the ecological, economic, and social benefits they provide within the built environment. The Advisor will also serve a \$430 million nursery industry, a significant economic driver in the three-county region. The northern San Joaquin Valley currently lacks dedicated UCCE expertise in environmental horticulture and ornamental nursery production despite increasing regulatory, environmental, and pest management challenges

facing both urban landscape managers and nursery operators. The regional nursery industry is experiencing growing pressure from endemic and invasive pests and diseases. This position will fill a critical gap by providing science-based IPM research and extension that support economically viable production systems, environmental stewardship, and informed pest management decision-making.

This region includes waterways of the Sacramento-San Joaquin Delta, which are critical for urban and agricultural water supplies and provide important wildlife habitat. A focus of the program will be protecting water quantity and quality through urban water conservation and science-based nutrient and pest management. Ornamental nursery producers face increasing pressure to manage nutrients and endemic and invasive pests, while maintaining profitability and complying with evolving environmental regulations. The Advisor can support the industry by extending information on nutrient budgeting, plant-soil-water relations, and IPM approaches like proper identification and monitoring, which will enhance the long-term sustainability of the region's nursery industry. Additional programmatic priorities include greenwaste diversion and landscape best management practices that improve urban soil and plant health.

The Advisor will address the 2040 UC ANR Strategic Vision by helping people and communities thrive. Extension and applied research addressing urban landscapes, including water conservation, greenwaste diversion and soil health, and integrated pest management bridge the overarching challenges posed by climate change and regulations, policy, and compliance. Improving the ecosystem services and ecology of urban landscapes will help to address systemic inequities in urban centers of the northern San Joaquin Valley. By developing and sharing science-based solutions for urban landscapes, the Advisor will uphold UC ANR public values addressing people, the planet, and prosperity. Over time, the anticipated condition changes that may be realized include an improved built environment, landscaping, and access to green spaces; improved land stewardship, water use efficiency and quality, and resilience to extreme weather; and increased stability, efficiency, and profitability of nursery and related industries.

Extension: The Area Environmental Horticulture Advisor will extend science-based information using a range of methods to reach diverse audiences. Extension programming will emphasize stakeholder-driven priorities identified through needs assessments, industry consultations, and partnerships with public agencies and professional organizations. The clientele to be served may include public landscape managers (parks, streets, schools, golf courses), commercial landscape professionals (architects, designers, construction, garden maintenance), nurseries, pesticide applicators and pest control advisors serving the nursery and landscape industries, and public and private agencies with purview over landscape development and management. The Advisor will be a primary source of knowledge in landscape horticulture and a source of University expertise in the northern San Joaquin Valley.

The Advisor will also provide academic oversight and deliver educational programming for the three Master Gardener programs in the region. The Advisor will ensure the quality, consistency, and scientific integrity of educational programming to Master Gardener standards. The Advisor will serve to inspire and motivate the two program coordinators (San Joaquin and Stanislaus counties) and volunteer coordinator (Merced County). In collaboration with program staff and volunteers, the Advisor will foster meaningful volunteer engagement in research and extension activities that support positive change in local communities. The UCCE Learning Landscape at the SJC Cabral Agricultural Center was established by the previous Environmental Horticulture Advisor and can be leveraged by the new Advisor to launch an Extension program with Master Gardeners and other clientele.

Research: The Area Environmental Horticulture Advisor will develop and implement an applied research program in urban landscapes and ornamental nursery production that addresses local needs. Specific and emerging areas of research may include water conservation and management aimed at reducing groundwater and stormwater pollution; nutrient management and the judicious use of fertilizers and pesticides in nurseries and the urban landscape; diversion of greenwaste from landfills to support regional climate change mitigation priorities and urban soil and plant health; integrated pest management of endemic and invasive pests and diseases affecting ornamental plant production and urban landscapes, including development of monitoring and decision-support tools; and ecosystem services of the urban landscape for ecological and social impacts. Research outcomes may contribute to reductions in unnecessary pesticide use, improved water quality protection, and increased economic sustainability for nursery operations.

UC ANR network: The Advisor can connect and collaborate with UC ANR Advisors and Specialists and AES faculty through the Environmental Horticulture, Floriculture, Berries, and Nurseries Program Team. While the northern San Joaquin Valley is underserved in the discipline of Environmental Horticulture, Advisors in the neighboring Capitol Corridor, East Bay, and southern San Joaquin Valley regions may serve as mentors and collaborators.

Network external to UC ANR: The Advisor will collaborate with private and public entities to develop a research and extension program that addresses priority issues for local clientele. Partners are likely to include agricultural commissioners, landscape contractor associations, irrigation districts and water quality coalitions, city and county parks departments, resource conservation districts, pest control advisors serving ornamental systems, public works departments, landscape nurseries, and other city, county and regional organizations and departments. Some of the largest wholesale tree and ornamental nurseries are based in the northern San Joaquin Valley (e.g. Generation Growers, Inc. and Devil Mountain Wholesale Nursery), so the Advisor will be positioned to network with leaders of the landscape industry. The Advisor also has the opportunity to join professional societies, like the American Society for Horticultural Science, to expand their professional competencies and network.

Support: The Area Environmental Horticulture Advisor will be headquartered in the SJC Cabral Agricultural Center. San Joaquin County annually budgets nearly \$1 million to support UCCE programming. The Advisor will be provided with a fully furnished office having phone, internet, printing, and copying capabilities. UCCE has two laboratories and a storage facility for research supplies and equipment. The SJC Cabral Agricultural Center has six meeting rooms with collective capacity for over 400 attendees, which are available to UCCE Advisors for extension activities. The Advisor will have access to a county vehicle for their program use. San Joaquin County supports 4.0 FTE of support staff, including three office assistants and a field and laboratory technician.

Other support: Grant support for the Advisor's research and extension program may come from the California Association of Nurseries, Britton Fund, and the Saratoga Horticultural Endowment. State agency funding to support water conservation and integrated pest management are available from the CA Department of Food and Agriculture State Water Efficiency and Enhancement Program or the CA Department of Pesticide Regulation Sustainable Pest Management grants program, respectively. Grants at the national level are available from the Horticulture Research Institute and US Department of Agriculture.