2026 UC ANR Cooperative Extension Position: UCCE Vegetable and Berry Crops Advisor San Luis Obispo (headquarters) and Santa Barbara Counties

Developed and proposed by: The Area Director and CE advisors for UCCE in San Luis Obispo (SLO), Santa Barbara (SB) and Ventura counties developed a draft position proposal with input from internal and external stakeholders. The UC ANR Vegetable Crops Program Team (PT) and Environmental Horticulture, Floriculture, Berries, and Nurseries PT provided substantial input to development of the final draft. In addition, the UC Hansen Agricultural Research and Extension Center (HAREC) Director and all above affirmed that this is a high priority position addressing key agricultural sustainability issues and will help ANR achieve it's mission. External stakeholders who provided input include: CA Strawberry Commission, CA Leafy Greens Research Board and CA Celery Research Advisory Board. These key stakeholder groups represent industries valued statewide annually at $3.1B, $4B, and $484M, respectively. Strong support was received from the SB and SLO County Agricultural Commissioners, Natural Resource Conservation Service (NRCS), Resource Conservation Districts (RCDs), and USDA researchers.

Position title: UCCE Vegetable and Berry Crops Advisor

Headquarters location and coverage area: The position will be headquartered in the UCCE SLO office with programmatic coverage in SLO and SB counties. Production areas in both counties are contiguous and clientele have similar issues. UCCE SLO is the ideal location for the position as most vegetable and berry production occurs in southern SLO and the adjacent Santa Maria Valley, all within 50 miles of the headquarters. The CE advisor will integrate, complement, and collaborate with existing local team members, especially Area IPM advisor Greer and Small Farms bilingual staff, Tuohey-Mote on extension. In addition, the CE advisor will be complementary to and synergistic with several CE advisors in SB County (Volk, Faber), as well as with advisors in the region including in Ventura (Daugovish, Biscaro, Cohen, Schmidt) and Monterey (Bolda, Beal, Brow, Cahn, Gazula).

Existing academic/programmatic footprint based at UCCE SLO consists of the Area IPM Advisor; 4-H Youth Development Advisor; Disaster Resiliency, Planning, and Policy Advisor (all covering **SLO, SB**, and Ventura); and Health Equity Advisor (currently on assignment at UC Davis). CE advisors with cross-county assignments are Agricultural Technology (based in Monterey, serving **SLO**), and a Production Horticulture and a Soils, Water, and Subtropical Crops Advisor (both based in Ventura, serving **SB**).

Position overview: The position will focus on vegetable and berry crop management, environmental quality, and sustainability of production.

a) General disciplinary focus: Innovations in the production of vegetable and berry crops with a focus on environmental quality and sustainability.
b) Educational and professional background: Requires a minimum of a master's degree in vegetable crop production, horticulture, agronomy, or other related fields. Knowledge of and experience in commercial vegetable and/or berry crop production, applied research, and educational programming is preferred. Spanish language skills are desirable.
c) Position reporting: Will report to the Area Director for UCCE SLO, SB, Ventura. Will engage with the UC ANR academics and staff within the assigned area and neighboring counties on collaborative research and extension programs addressing high priority issues of coastal vegetable and berry crops.

Justification: The Vegetable and Berry Crops Advisor will drive innovation by advancing climate-resilient production systems, labor-saving technologies, data-driven decision tools, regulatory compliance strategies, and inclusive extension programs that support underserved farmers. Since the departure of CE advisor Dara in early 2022, there has been no CE advisor covering SLO and SB focused on vegetable and berry crop production issues. This has resulted in a critical gap between Monterey and Ventura in ANR's commitment to serving these major

agricultural sectors. In 2022, SB and SLO accounted for over 36% of all strawberry production in California and SB was the 5th leading vegetable producing county in the state. In 2024, total gross production value for berry crops was $1.2B ($998M in SB and $242M in SLO) and for vegetable crops was $908M ($628M in SB and $280M in SLO). Furthermore, these crops accounted for ~81% and ~52% of all gross agricultural production value for SB and SLO counties, respectively. In the last decade, the annual value of strawberry production in SB County increased more than 85% and for vegetable crops 35%. This position will leverage ANR's unique capabilities and mission of sharing equitable and collaborative science-based solutions as SLO and SB have a high concentration of small and underserved farmers (as identified by the UC ANR Small Farms Network) who often lack access to in-house research and development. Further, local agricultural commissioners have noted that, as a high value crop, strawberries are providing unique opportunities for first time farmers, however, these farmers currently lack consistent access to on-the-ground extension and applied research to be able to thrive. This position is uniquely situated to support ANR's goals of nurturing a thriving entrepreneurial ecosystem and equitable workforce development.

Needs: This position ranked #1 and #2 among UC ANR Vegetable Crops PT and Environmental Horticulture, Floriculture, Berries, and Nurseries PT, respectively. While there is an IPM advisor in these counties, there are extensive unmet needs for vegetable and berry crops beyond pest issues. The PTs recognize that this position fills a critical gap in ANR's efforts to enhance and improve agricultural sustainability. Commodity research funding organizations list several research and education priorities that we currently do not have the capacity or expertise to address. Knowledge gaps identified by clientele and stakeholder groups that will be addressed by this position include innovations in crop production practices, irrigation, nutrient management, water quality, food safety, labor savings through technology and organic production. The advisor would immediately contribute to:

1) Climate resilient production: Develop and demonstrate alternatives to chemical fumigation, climate-wise irrigation, and pollution prevention.
2) Labor innovation: Investigate and demonstrate novel technologies for mechanization, harvest-assist, laser weeders, workforce training models and other labor savings to improve efficiency.
3) Data driven decision making: Evaluate and demonstrate best management practices using weather, pest, GIS, and market data to improve management and reduce food safety risks in vegetable and berry production.

Outcomes/Impact: This position will address many of the interrelated challenges in UC ANR's Strategic Vision 2040. The overarching challenge that agriculture and food systems face barriers to productivity, sustainability, and profitability will be the focus. In addition, the position will address issues related to impacts on natural ecosystems and barriers to thriving people and communities, including a focus on new and underserved farmers. Development and implementation of new technologies and practices to address the challenges will facilitate local adoption in this thriving production region. Measurable outcomes expected in this position after the first 5 years may include: 10% reduction in fumigant use among strawberry growers participating in extension field days, at least one improved irrigation or nutrient management practice reported by growers covering 20,000 acres of veg and berry crops, and a 15% reduction in agricultural labor costs among early adopters of new farm technologies. These outcomes will contribute to UC ANR-identified condition changes of a) increased stability, efficiency, and profitability of agriculture b) increased ecological sustainability of agriculture, c) improved water use efficiency and water quality, d) increased agriculture and food system resilience to extreme weather and change in climate, e) improved food safety and security, and likely several others.

Extension: Extension and outreach methods will include publications, educational meetings, trainings, and field days, and online methods including social media. Key clientele include vegetable and berry growers, farm managers, pest control advisers, certified crop advisers, field workers, irrigators, and affiliated industry representatives. Collaboration with local and neighboring ANR county and campus-based academics, agricultural commissioners, USDA scientists, regulatory personnel, private industry, and others is anticipated. In addition, there is an opportunity to partner with the UC Small Farms SRA who provides bilingual outreach to new and small growers in the counties. The advisor will deliver science-based solutions at educational events organized

by commodity boards, agricultural commissioners, CA Association of Pest Control Advisers, Pesticide Applicators Professional Association, Grower Shipper Association of SB and SLO counties, NRCS, RCDs, etc.

Research: Climate change, labor costs, water quality and availability, invasive and evolving pests and plant pathogens, and agricultural regulations are anticipated to be the main drivers of the research framework for this position over the next 20 years. Examples of potential research include: 1) Development and demonstration of alternatives to chemical fumigation (e.g. integration of cultivar resistance with non-fumigant soil disinfestation methods, essential to sustaining berry production). 2) Evaluation and improvements in irrigation efficacy and nutrient management to reduce nitrate impacts on ground and surface water, required for compliance with regional water quality requirements and to conserve irrigation water. 3) Evaluation of labor cost savings such as robotics in mechanization of harvest, weed control and other field operations. 4) Evaluation of vegetable and berry crop germplasm for suitability to the region and resistance to key insect pests and pathogens. 5) Evaluation of best management practices to reduce food safety risks in vegetable and strawberry production.

UC ANR network: The two PTs noted above recognize the gap in ANR coverage in this region and this position addresses many of the PT priorities documented in their plans of work. The position will fill a large gap addressing unique issues to SLO and SB producers, and can create synergy between UC researchers serving the Salinas Valley and Ventura County, enhancing ANR's ability to support the economic and ecological sustainability of vegetable and berry crops across California. UC IPM Advisor Greer has an existing relevant pest management program and neighboring CE advisors in Monterey, Santa Cruz, and Ventura Counties have established research and extension programs with a strong spirit of collaboration and innovation. The CE advisor could immediately contribute to current funded projects such as Fusarium wilt management in lettuce and celery, supported by commodity boards, and expand collaborative efforts into SLO and SB counties with UCCE specialists and AES scientists. Inclusion of this advisor in collaborative networks will greatly increase ANR capacity to succeed in obtaining competitive funding for the needs of the region. HAREC is available for field space and facilities for collaborative research trials and outreach events with Ventura advisors.

Network external to UC ANR: In addition to the network of partners already noted, this position could collaborate with USDA ARS scientists, other land grant institution academics, Cal Poly faculty, and private industry to develop and shape research and extension projects. There are also opportunities to partner with commodity boards, agricultural commissioners, CA Association of Pest Control Advisers, Pesticide Applicators Professional Association, Grower Shipper Association of SB and SLO counties, NRCS, RCDs, and local Farm Bureaus to develop and deliver extension programs.

Support: This position has substantial local support, including fiscal, transportation, facility, and administrative.

a) Transportation: UC vehicle and fuel and travel funds.
b) Office space: Office and lab at UCCE SLO and working stations in SB.
c) Supplies and equipment: Funding for agriculture supplies and equipment are available at the two counties in addition to existing various donor funds for vegetable and berry crop work in both. Access to UC Hansen REC (at reduced recharge rate) for projects and program delivery.
d) Research costs: Existing various donor funds for vegetable and berry crop work may be used for some startup costs before advisor is generating grant funds.
e) Administrative support: Office manager and office assistant to support extension and research admin.

Other support: Sources of funding or support that the position can pursue in order to develop and sustain their program are: CA Strawberry Commission, CA Leafy Greens Research Board and CA Celery Research Advisory Board. The advisor may also serve as PI or collaborator on state and federal funding sources such as CA Department of Food and Agriculture, Fertilizer Research and Education Program, and USDA grant programs. Importantly, grower and industry cooperators will provide in-kind support for projects focusing on their needs.