Position Title: Local Food Systems Farm Advisor, Central Sierra Multi-County Partnership

Position: The advisor will serve clientele in the Central Sierra Multi-County Partnership (El Dorado, Amador, Calaveras and Tuolumne counties) with a disciplinary focus on commercial agricultural crops including; tree crops, vegetables, fruits and berries. The advisor is responsible for the assessment, development, implementation, and evaluation of educational and research programs that will have significant impacts to the agricultural economy contributing to the sustainability and competitiveness of local agriculture. This position will assist farmers, processors, and marketers to make a profit in local agriculture while promoting sustainable practices. The advisor will collaboratively develop and disseminate science-based practices for farm innovation and adoption, including niche and organic production, marketing, resource sustainability, and appropriate-scale equipment and technology. The advisor will also work with producers to expand their role and contribution as foundational members of the area's food system and community. The position includes providing academic oversight of the five Master Gardener (MG) programs consisting of 300 volunteers throughout the region, educating home gardeners. Qualified candidates will have a minimum of an MS degree in horticulture, agricultural science, agricultural production systems or a closely related field. Experience working in multiple cropping systems, organic farming practices, small farm production systems, integrated pest management, and marketing methods is highly desirable. This position will report to the Central Sierra Multi-County Partnership (MCP) Director and will interact internally with the UCANR Small Farm Program & Advisors, Small Farm Workgroup, the Ag Production Management Systems Program Team, Environmental Horticulture Program Team, the Sustainable Food Systems Initiative and the Master Gardener Statewide office.

Justification: This position will strengthen a growing number of Central Sierra food production systems, thereby addressing several ANR Strategic 2025 Initiatives. For ANR to help *Enhance Competitive, Sustainable Food Systems*, the economic viability of local agriculture will depend on our ability to adapt to population growth, water and land availability, technological change, and fluctuating markets. The Central Sierra region consists of over 2,800 farms (2012 USDA Ag Census) that range in size from a sub-acre to a few hundred acres. Farmers grow a multitude of crops year-round with the majority sold at farmers markets, roadside stands, community supported agricultural programs, grocers, restaurants and other retailers. Over the past 15 years there has been a significant increase in the number of small farms throughout the region. Clientele include paraprofessionals lacking agricultural experience that have relocated to the region to start a new agricultural enterprise, while others are young beginning farmers. Often both groups lack horticultural or agricultural training and rely heavily on the University of California Cooperative Extension (UCCE) for expertise in determining what is appropriate to grow profitably. Another significant issue facing Central Sierra small scale farmers is access to reliable pest management information. Nearly all the farms are owner operated and apply their own pest control products. There is a lack of local professional agronomy and pest control advisor services, making the demand for scientifically accurate pest management information from UCCE crucial.

The area has also seen a significant increase in niche food production, such as apple cider, craft beer, distilled spirits, and other value-added products. As a result, there has been interest in further expanding agriculture crops needed for these products. These crops are more economically viable and as a result, farmers not being familiar with them, are asking cooperative extension for cultural advice to grow them. With the adoption of the California Cottage Food law in 2013, individuals can now prepare and/or package certain non-potentially hazardous foods in private-home kitchens referred to as "cottage food operations" (CFOs). Local farmers as well as non-farmers have shown great interest in cottage food products and the advisor would be the conduit for expanding this enterprise.

This position will also work in *Food, Human Nutrition and Health*. Throughout the nation, state and region, consumers are becoming more aware of our food system and are demanding greater access to local food. The advisor will work closely with local farmers, agricultural marketing programs including El Dorado County Farm Trails, Farms of Amador, CalaverasGROWN, Farms of Tuolumne County, and the numerous Farmers Market organizations in the region to assist producers and consumers in supporting local and regional food systems. The advisor will reinforce the vision of a California agriculture in which small farms remain dynamic, viable components of their communities. A key factor in keeping local farmers sustainable is keeping them profitable. The advisor will work with local growers and agricultural groups to help develop more market channels, diversify cropping systems and evaluate value added products.

Extension: Existing knowledge gaps include: improvement of production practices, nutrient and irrigation management, pest management, food safety, worker safety, postharvest handling, alternative crops, organic farming practices,

succession planning, and enterprise and market analysis. The focus of this position is to provide research-based information and educational programs to farmers, such as the challenges of pest management on the urban perimeter, enhancing soil health, new crops and the benefits of value added enterprises. Extension activities will include grower meetings, field days, mass media and personal one-on-one farm visits. A beginning farm series short course to address the educational needs for entry level farmers including business planning, production systems, and marketing has been successful in other parts of the state and would be extremely successful in the region. The advisor will also provide expertise to the Master Gardener programs as a speaker and providing academic oversight to educational materials.

Research: A successful research program will include collaborative research and leadership addressing the needs of the niche clientele. Small-scale growers in the four counties have unique climates, soils and production systems which will require the advisor to develop a local knowledge base and understanding of each region. Farmers have explicitly expressed the need for research in 1) the selection of crop cultivars for specialty (niche) and organic production, 2) appropriate horticultural practices, 3) marketing strategies for niche crops, 4) reduced tillage strategies, 5) the development of small-scale farm implements, 6) pest control strategies, and 7) the integration of crops and livestock, and 8) water efficient cropping systems. Publication outlets include peer reviewed journals such as California Agriculture, Journal of Extension and Journal of Sustainable Agriculture, and industry periodicals such as Ag Alert and CAPCA. Research will be synthesized in ANR publications, the internet, and other outlets as appropriate.

ANR Network: The Advisor is expected to develop strong programmatic ties with Livestock, Plant Science, Nutrition, Youth Development, and Natural Resource advisors in the broader Central Sierra region, neighboring counties and across the division. This advisor will complement the programs of other advisors in the MCP. Currently, all agriculture in the MCP is supported by just two positions: a general farm advisor who serves viticulture, pomology and Christmas tree clientele and a natural resources/ag advisor that also serves as the MCP director and Master Gardener advisor. This position will add a specialized focus on vegetable, fruit, tree crop and ornamental operations and significantly strengthen ANR's footprint in the MCP as well as neighboring counties. This position will be supported by CE specialists and AES researchers at UC Davis (Plant Science, Agriculture & Resource Economics, and Agriculture Sustainability Institute), and UC Berkeley Department of Agriculture & Resource Economics, Policy and Management. The advisor will also collaborate and help steer the five Master Gardener (MG) programs throughout the region by providing technical expertise and utilizing the volunteer program to assist in the dissemination of information to home gardeners. Each MG program in the MCP is staffed and staff report to a Community Education Supervisor. The advisor will provide the academic oversight of the program and serve as a resource for trainings, research and technical expertise.

Network External to ANR: The advisor will work closely with a variety of stakeholders including county and regional agricultural marketing organizations such as Farms of Tuolumne County, CalaverasGROWN, Farms of Amador and El Dorado Farm Trails. The advisor will also work with farmers' market associations and several government agencies such as USDA's National Resources Conservation Service, USDA Farm Service Agency, Resource Conservation Districts, and county Agricultural Commissioners. There is also a very strong network of school gardens/farms across the region. For the past three years, the MCP has been fortunate to collaborate in the FoodCorps Program and support five service members in the region. FoodCorps is a nationwide team of AmeriCorps leaders who connect kids to real food and help them grow up healthy. The advisor will collaborate with these partners providing expertise and support for further expanding agricultural and environmental literacy throughout the region.

Support: Support for this position, including office space, travel, communication (telephone, internet), clerical support, and office supplies are provided from the MCP.

Other support: Local financial support can be supplemented by federal and statewide grant programs including CDFA Value-Added Block Grants, USDA Specialty Crop Block Grants and Rural Development Block Grants. In addition, there are a number of internal UC funding sources including the ANR Competitive Grant Program.

Location: The advisor would be housed in either Calaveras or Amador counties, which is geographically centered in the region and within 1 to 1.5-hour drive from each end of the assigned area.

Developed and proposed by: Scott Oneto, UCCE Central Sierra MCP Director with input from the Agricultural Production Management Systems Program Team, Environmental Horticulture Program Team and the Small Farm Workgroup.