# UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

## UNIVERSIDAD DE CALIFORNIA Agricultura y Recursos Naturales

#### Position Description Qicheng Tang Assistant Project Scientist, Water Resources and Resiliency <u>Effective Date: April 10, 2023</u>

#### PURPOSE & CLIENTELE

This position (Assistant Project Scientist, Water Resources and Resiliency) was set up to contribute to Napa County's sustainable water management. The project scientist is expected to conduct creative research projects addressing water resources and resiliency in Napa County. It is expected for the project scientist to promote water stewardship such as surface and groundwater and help enhance system resilience towards future climate anomalies. In addition to research, the assistant project scientist is expected to engage and disseminate water knowledge with different stakeholders, including but not confined to the public, technical committees such as Napa County Groundwater Sustainability Agency (NCGSA), and the Watershed Information Center (WIC). The project scientist is based at the UC Cooperative Extension facility in Napa County. The major focuses of the geographical areas include most of the Napa Valley Subbasin, especially regions most vulnerable to future droughts where groundwater is undergoing substantial depletion. In Napa, this position (assistant project scientist) is the only one that specifically targets water resources and management; however, it is necessary to develop good connections with advisors of similar titles (e.g., irrigation and water management advisor) from other counties. The project scientist's duties and responsibilities are generally divided into research (65%), outreach and public service (15%), and professional competency and activity (20%).

#### ACADEMIC PROGRAM MAJOR RESPONSIBILITIES

- Technical Competence
  - Ensure clientele needs are assessed, and develops program goals to successfully meet clientele needs, in alignment with UC ANR's strategic initiatives and Public Value Statements.
  - Conduct applied hydrologic research designed to solve locally relevant problems and monitor related changes in below areas:
    - Water budget quantification.
    - Hydrologic system resilience.
  - Maintain and promote UC ANR's credibility by providing science-based knowledge on hydrologic sciences and skills independent of personal or parochial interests.
  - Represent UC ANR locally in a professional manner.
  - Ensure that outcomes and impacts are measured and communicated.
  - Peer-reviewed journal articles, popular press, online educational resources.
    Develop a research program investigating Napa water resources and resiliency to
    - promote water stewardship. Specifically in areas of:
      - Crop water use demand.
      - Rainfall-runoff analysis.
      - Groundwater-surface water connectivity.
      - Groundwater recharge
- Communication

- Conduct and report regular needs assessments to identify priority issues or problems relevant to the local clientele groups being served. The communication could be achieved through several venues:
  - Quantitative and qualitative surveys of agricultural, commercial, rural and urban water users to assess use trends, understand decision-making practices, identify knowledge gaps and potential collaborations.
- Disseminate useful, science-based information to clientele, using extension methods that are responsive to clientele needs and appropriate for the audience and situation.
  - Factsheets, handouts, and videos that summarize Napa water information and knowledge.
  - In-person and virtual educational events, such as seminars, workshops, field days.
  - Newsletters disseminated through the ANR programs, popular press, and industry collaborators.
- Evaluate programs and report accomplishments, results, and potential or actual impacts to scientific and lay audiences.
- Foster an increased understanding of UC ANR's Cooperative Extension's research and education programs in clientele, the public and policy makers.
- Effectively use online communication methods and associated software programs to support research and instruction.
- Actively advocate for UC ANR program awareness and support.
  - Raise awareness of ANR Water Resources Programs with different academic and industry partners.
- Collaboration, Teamwork and Flexibility
  - Develop collaborative teams with other UC ANR academics, campus-based specialists, and faculty and/or others, to address priority issues for UC ANR. These could include:
    - UC Davis Watershed Center.
    - UC Davis Agricultural Water Center.
    - UC irrigation or water resources advisors and specialists.
  - Act as a facilitator in the public policy arena to effectively bridge divergent interests around water resource issues.
  - Interact with UC ANR Program Teams, specialists, and others within the research/extension network to develop, strengthen and expand program goals. These could include:
    - Oakville Experimental Vineyard experts.
    - Watershed Information Center (WIC).
    - California Institute for Water Resources (CIWR).
    - UC ANR Strategic Initiatives: Sustainable Natural Ecosystems & Sustainable Food Systems
  - Participate in UC and UC ANR leadership, through committees, task forces and other formal or informal structures.
  - Serve the California public by participating in activities of public agencies and organizations such as:
    - Napa County Groundwater Sustainability Agency (NCGSA)
    - Napa County Flood Control and Water Conservation District
    - Napa County Climate Change Committee
    - Napa County Agricultural Commissioner's Office
  - Interpersonal Relationships: Be an effective listener and communicator, take responsibility for our own actions, motivate others, keep commitments, and cultivate political and industry support for UC ANR.
  - Build relationships to work with diverse populations and acclimate to varying circumstances.

- Model and support a good team working environment.
  - Following UCCE-Napa guidelines for effective teamwork.
- Professional Development and Lifelong Learning
  - Participate in professional organizations and collaborate with federal, state and county governmental agencies, non-government organizations and others by providing independent science-based information and leadership. One example is:
    - ANR Water Program Team Group
  - Maintain a program of continuous self-improvement by participating in in-service training, seminars, workshops, work group & program team meetings, short courses, professional society meetings and other relevant opportunities.
    - A regular attendance of webinars, workshops, and training sessions, for example, the UC ANR Water Webinar series.
    - Follow the most recent literature on water research and technologies.
  - Advocacy and Communication
    - Represent UC ANR (unit and programs) in a professional manner. Maintain positive relationships with stakeholders and clientele in assigned geographical or programmatic area. Meet with and provide responsive communications with key stakeholders (e.g., industry partners, donors, policy makers and elected officials, and others as required).
    - Increase awareness of UCCE in assigned geographical areas by disseminating information on behalf of the unit to county residents, stakeholders, clientele, and politicians.

### AFFIRMATIVE ACTION and DIVERSITY, EQUITY, AND INCLUSION (DEI)

- Comply with all applicable federal and state laws and regulations, and all University policies regarding affirmative action, including prohibition of discrimination on the basis of race, color, national origin, religion, sex, sexual orientation, physical or mental disability, age, veteran status, medical condition, ancestry or marital status.
- Promote, in all ways consistent with other responsibilities of the position, accomplishment of the affirmative action goals established by UC ANR.
- Take all measures necessary to assure any employee or volunteer workers supervised by this position fulfill their affirmative action responsibilities.
- Develop a statement of program mission and definition of potential program clientele that embody a commitment to serve diverse ethnic and gender groups.
- Plan and conduct programs in such a manner as to provide equitable service to all ethnic and gender groups that comprise the potential clientele population for the program.
- Identify any barriers to clientele participation related to ethnicity, gender, or other characteristic of concern under the University's affirmative action policies and take corrective action as needed to remove such barriers.
- Collect, and keep current, demographic data identifying the ethnic and gender distribution of the potential clientele populations for the program and describing other characteristics of the population relevant to the pursuit of the Division's affirmative action goals.
- Compile and maintain documentation of service to each ethnic and gender group within the clientele population served by the program, including statistical records of clientele contacts, quantitative evaluations of benefits realized by clientele and reports of any special efforts to serve under-represented groups.

#### **RELATIONSHIPS**

Administratively responsible to UCCE-Napa County Director for the conduct of the UC ANR program(s).

#### **QUALIFICATIONS**

A Ph.D. in hydrologic sciences, water resources or a closely related field is required. Specialty and/or professional experience must demonstrate capacity or potential to accomplish teambased research and education programs consistent with the values of Cooperative Extension.

Must be able to work independently and collaboratively in teams and provide leadership for research and education activities. Must be adaptable to different work circumstances and work with a diversity of people and collaborators.

Must be literate in internet communications and software appropriate to support research and education programs.

**Reviewers:** 

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Academic (your name and title)

10-05-2023 Date

Monica Cooper

County/REC Director or Supervisor

October 5, 2023 Date

**Final Approver:** 

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11/14/23023 Date

Dr. Daniel Obrist Vice Provost of Academic Personnel