

**Butte County Resource Conservation District  
Engineering Technician Position**



**INTRODUCTION**

This is an engineering tech position assisting the Butte County Resource Conservation District in partnership with the Natural Resources Conservation Service (NRCS), and is located at the NRCS Field Office in Oroville, CA. The incumbent serves as a field or staff engineer and is responsible for providing basic technical guidance regarding the overall planning, design, installation, evaluation, and maintenance of the engineering phases of soil and water conservation practices.

**DUTIES AND RESPONSIBILITIES**

**1. Irrigation Water Management Assistance and Outreach (40%)**

a. Assist farmers and field personnel by promoting the use of irrigation efficient methods. Perform Irrigation Water Management (IWM) practice installation follow-up consultations, including assessing irrigation timing and documentation.

b. Assist with development and distribution of technical assistance materials.

c. Develop and host several informational workshops to guide farmers through the application process for California's SWEEP (State Water Efficiency and Enhancement Program), and train applicants to successfully apply to the program.

d. Host web-based tutorials on the SWEEP program.

e. Provide and maintain a safe and healthy work environment, using safety precautions when handling dangerous objects, chemicals, extreme temperatures, etc.

**2. Engineering Practice Design (30%)**

a. Assist field personnel in the planning, design and engineering of practices such as water management, erosion control, flood control, and other conservation practices needing engineering guidance.

b. Review design plans and specifications for contractors, properly interpreting specifications to solve problems at the local level. Assist in the calculations of earthwork, concrete, steel, conduits, and other materials, and prepare construction estimates and bills of materials.

c. Provide engineering assistance and direction to the assigned area and helps provide engineering continuity and coordination across areas.

### **3. Quality Assurance (30%)**

- a. Make site investigations and field-check designs as prepared/approved by the NRCS State Conservation Engineer (SCE). Assess structural works of improvement prior to contracting; prepare or review field designs, preliminary and final drawings, and specifications on agricultural engineering practices for review by higher level engineer. Check designs for ease of construction, availability of materials and whether or not structures are adapted to the specific site.
- b. Conduct evaluations of irrigation improvements funded by SWEEP (State Water Efficiency and Enhancement Program). Utilize mobile irrigation laboratories (MILs) and/or other tools to measure water flows and pressures; conduct statistical analysis of field data to measure distribution uniformity (DU).
- c. Share and discuss irrigation evaluation results with growers and their staff.
- d. Aggregate irrigation evaluation data to maintain grower anonymity, and then share the data with local RCDs/CARCD, California DWR, and/or others as necessary.

### **WORK ENVIRONMENT**

Most work is performed in an office setting, but frequent trips to field sites involve exposure to construction equipment and the environment, including extreme temperatures of hot and cold. Exposure to noise levels common to construction sites with large earthmoving equipment can be expected. There will be exposure to disease carrying insects and irritating plants.

The work requires some physical exertion such as long periods of standing, traversing steep slopes and rough construction sites, repeated bending and stooping, jumping across shallow ditches, walking in soft, muddy and slippery conditions, and lifting and carrying equipment and samples that weigh up to 50 pounds.

### **QUALIFICATIONS**

- A 2-year or 4-year degree in an engineering-related field, or 6 years experience in industrial ag irrigation applications.
- Basic familiarity with AutoCAD, Microsoft Office, and ArcGIS preferred.
- Applicant must have a valid driver's license

### **HOURS AND COMPENSATION**

This is a part-time position with approximately 16-24 hours available per week (depending on seasonal demand for irrigation services). Compensation to be negotiated based on qualifications and experience.

**This recruitment will remain open until filled.**

To apply, send a cover letter and resume to Butte County Resource Conservation District:  
bcrd@carcd.org