



### ENGINEERING INTERN





The Engineering Intern position at Glenn-Colusa Irrigation District presents a unique and exciting opportunity to join a dynamic, public service-focused team at the largest irrigation district in the Sacramento Valley.



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## 🔄 The Position

Under the direction of the District Engineer and as specified in Employee Engagement Letter Paragraph 1, the Engineering Intern participates in and contributes to the District's engineering, water resources and water operations activities; and assists with diverse field and office tasks that support monitoring, design, planning and organizational workflows.



## The District

Glenn-Colusa Irrigation District (GCID) serves agricultural water needs within Glenn and Colusa counties in Northern California. Its primary water right was established in 1883, making it one of the oldest and largest water rights on the Sacramento River. The District was formally organized as the Glenn-Colusa Irrigation District in 1920.

GCID's core mission is to deliver a secure and reliable water supply to its landowners and water users, as efficiently and economically as possible, while preserving and protecting all resources. Covering more than 175,000 acres, GCID is the largest agricultural district in the Sacramento Valley and one of the largest in the state. GCID's main pump station, its only diversion from the Sacramento River, is located near Hamilton City. An extensive canal system, including a 65-mile main canal and more than 1,000 miles of laterals and drains, conveys the water to more than 1,200 water users, irrigating about 140,000 acres of farmland.

GCID also serves 1,200 acres of private habitat land and more than 21,000 acres of protected federal wildlife refuges.



#### **FIELD TASKS**

- ✓ Assist engineering staff with the collection, reporting, analysis and consolidation of field data
- ✓ Use various types of field equipment, including acoustic Doppler velocimeter, acoustic Doppler current profiler, survey level, as well as mapping and survey grade GPS units
- Review, evaluate and develop improvement plan based on the ITRC recommendations for lateral headworks flow measurement
- Collect flow and stage measurements at lateral infrastructure sites to support the design phase of improvements, including repair and replacement of facilities
- Perform flow measurement on District laterals, creeks, and drain outflow sites to calibrate measurement devices at distinct operating points
- ✓ Assist with design surveys for proposed precast concrete turnout sites
- ✓ Locate and GPS survey land marker monuments to support the preparation of lateral easement agreements
- ✓ Assist with the bathymetric survey of the post-dredged GCID Intake Channel
- ✓ Conduct topographic and grade surveys with engineering staff

#### **OFFICE TASKS**

- Assist engineering staff with field data entry, mapping, filing, reporting and design workflows
- ✓ Use various software programs, including Microsoft Excel, AutoCAD, ArcGIS, and SonTek RiverSurveyor Live
- Assist Water Resources and Water Operations departments on the development and improvement of District water budgets, water needs, demands and water supply alternatives
- ✓ Update hydrographs in Microsoft Excel for infrastructure improvement sites and established monitoring stations
- ✓ Aid in performing hydraulic and statics calculations to assist with the design of water conveyance infrastructure
- ✓ Generate maps for projects and planning purposes
- ✓ Enhance GIS attribute data associated with District facilities
- Assist with archival scanning of large format hard copy records and the electronic filing and indexing of said records

## Job Standards/Specifications



#### **KNOWLEDGE OF:**

Operations, services and activities of irrigation water distribution and operations program

- - Record keeping principles and practices



Computer concepts, with the ability to record data and download reports

Occupational hazards and standard safety precautions

#### ABILITY TO:

- Assist with coordination and implementation of District water operations and engineering projects in coordination with staff, consultants, agency personnel and others
- Perform data collection accurately and as directed



Assist with review and preparation of a variety of engineering studies and reports



Use computer systems and software packages related to engineering analysis and functions



Communicate clearly and concisely, both orally and in writing; prepare clear and focused correspondence and reports



Adhere to District standards for data collection, technical drawings, plans, maps, filing and other work



Establish and maintain cooperative working relationships with co-workers, outside agencies and the public



Demonstrate regular attendance and adherence to prescribed work schedule to conduct job responsibilities

Maintain proper work safety standards

Perform related duties as assigned

Carry, push, pull, reach and lift objects of medium weight and up to 50 pounds in the field.

#### **TYPICAL PHYSICAL ACTIVITIES**

- Travel by vehicle while conducting company business
- ✓ Work above and around water, boats and related equipment
- ✓ Work in an environment with exposure to dust, dirt and hazardous materials
- ✓ Work at a desk and sit for extended periods
- ✓ Stand and walk for extended periods
- ✓ Use office equipment such as computers, copiers and scanners

#### **ENVIRONMENTAL FACTORS**

- ✓ 60% or more work time spent outside and exposed to the sun
- ✓ Considerable work time may be spent in temperatures above 100 degrees, wind, wet and cold conditions, and humidity
- May occasionally be exposed to unusually loud sounds and noise
- ✓ May work on slippery or inclined surfaces
- ✓ May work in or around areas with minor amounts of dust

#### **OTHER REQUIREMENTS**

- Hearing and vision within normal ranges with or without correction
- ✓ Occasional irregular or extended work hours



# Desirable Qualifications

Education: Some educational background in the field of Engineering, with an interest or emphasis on water resources engineering; or equivalent of four years of work experience in this field.

# License, Certificate, Registration Requirement

Possession of a valid California Class C Driver's License required at the time of appointment. Possession and proof of a driving record free of multiple or serious traffic violations or accidents for two consecutive years.

PAY: \$20-\$30/HOUR, depending on experience



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### Application Process & Recruitment Schedule

To learn more about GCID, visit our website at **www.gcid.net.** Application available at **www.gcid.net/employment**. Please submit application, cover letter and resume online or mail to P.O. Box 150, Willows, CA 95988.

### **Open until filled**

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.