

## Use Case:

### How are Groundwater Districts in California Improving Monitoring & Compliance with Remote Water Level Monitoring?

#### Problem

In response to declining groundwater levels and a new California water regulation, the Fresno Irrigation District (FID), a member of the North Kings Groundwater Sustainability Agency (GSA), needed to adopt new approaches to protect, manage, and monitor the District's groundwater resources.

Historically, the FID team relied on manual data collection. However, this approach required staff to be on site at recharge and recovery facilities to gather data, which limited FID's ability to track changes over time, fully understand the impacts of its decisions, and take timely action. Under the new water regulation, the North Kings GSA was also required to develop a sustainable water plan for the entire FID region. Faced with these new standards, both organizations sought a more efficient, remote, continuous groundwater monitoring solution.

#### Solution

After a significant period of thorough investigation and testing of potential solutions, the FID selected the [HOBBO® MicroRX Water Level Station](#), an affordable, compact, rugged, cellular station that would allow the team to continuously collect accurate, real-time water level data and view it remotely via the [LI-COR Cloud®](#) platform (formally HOBOLink). FID was able to quickly deploy the easily installed monitoring system and begin gathering critical data right away, without significant downtime or disruption to ongoing operations. Based on this success, FID recommended the HOBBO MicroRX to North Kings GSA, which subsequently acquired its own systems for its regional groundwater monitoring efforts.



## Results

Since implementing the HOBO MicroRX solution, both FID and North Kings GSA have seen significant improvements. By eliminating the need for on-site readings, they're saving time and resources, which have been redirected toward more critical operations. With LI-COR Cloud, staff members have 24/7 access to data that used to require on-site work to obtain, enabling them to make more informed decisions, act quickly as needed, and easily develop and submit reports to the California Department of Water Resources.

Now, these organizations can view real-time benefits of recharge operations and determine how long it takes to see its effect on groundwater levels after local and regional groundwater well operations. This provides them with insights into seasonal and annual trends, helping them to manage the basin's resources more effectively and avoid aquifer depletion. Given its cost-effectiveness, ease of installation, and scalability, FID has already expanded its network of HOBO MicroRX stations to help ensure compliance with California's new regulatory standards as well as meet the needs of residents across the state.

*The HOBO MicroRX Station is an easy-to-set-up remote monitoring solution that provides us real-time data and allows us to take a proactive approach to our annual groundwater monitoring, providing quick access to groundwater conditions during recharge & recovery operations.*

*-Christopher Lundeen  
Engineering Technician, Fresno Irrigation District*

## Products Used

Product	How it was used
<a href="#">HOBO MicroRX Water Level Station</a>	To continuously collect accurate real-time water level data
<a href="#">LI-COR Cloud IoT Platform</a>	For 24/7 remote access to water level data, customized dashboards, and automatic text/email alerts



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