

Project: East Side Reservoir
Client: California Fish & Game
Location: Winchester, California
Year: 1994

Weather Station Network:

Intermountain Environmental was contracted to develop, install, and maintain a small weather station network that would measure microclimate data around the East Side Reservoir Project that was being constructed southeast of Los Angeles, California near the City of Winchester.



Picture of what East Side Reservoir would look like when completed.



Application Notes:

The East Side Reservoir Project was in its infancy at the time of the installation. Construction crews were in the process of building large earthen dams on both ends of a valley that ran between two small mountain ranges. On the southern side of the reservoir there is a natural game reserve. The California Fish and Wildlife Department was interested in knowing what the affects of the construction of the East Side Reservoir would have on the climate around the reservoir. This in turn would be part of a complete study of how the reservoir affected plant and animal life in the area.

Installation and System Design:

Twelve monitoring sites were selected at locations both inside of the game reserve and outside of the area that was to become the reservoir. Two other sites were set up on smaller game reserves that were located away from the reservoir. The configuration of the weather stations was essentially identical at each location. Each weather station included data loggers with sensors for measurement of Air Temperature and Relative Humidity (RH50), Wind Speed and Direction (WS3001), Soil Temperature (SM229), Soil Temperature (WT107), and Precipitation (RG5256). Each station runs off of a (PS1270) small 12 Volt DC, 7 amp hour sealed lead acid rechargeable battery that is recharged with a (MSX10) solar panel. The instrumentation was mounted on a (IT10) Semi-Portable Instrument Tripod that was secured by bolting the feet to cinderblocks that had been filled with concrete with a threaded bolt protruding from the concrete. This method made it fairly simple to locate the tripods even in rocky areas. Each leg of the tripod is adjustable which facilitated the leveling of each station regardless of the grade of the terrain.



A weather Station at Skinner Lake: Measuring Air Temperature, Relative Humidity, Wind Speed & Direction, Soil Moisture, Soil Temperature, and Precipitation with a Handar 555 data logger.

An FWS employee using a laptop computer with a direct connection cable to the data logger is collecting the data from each site.

Intermountain Environmental has been contracted to maintain the sites as often as budgets will allow.

For Information on this project or these products please contact:

Intermountain Environmental, Inc.
601 W. 1700 S. Logan, UT 84321
Phone # 435-755-0774
www.inmtn.com

