

# Playa Instrumentation

**All equipment will be placed inside a fenced enclosure near the center of the playa lake. Surface and subsurface equipment will include:**

## **Basic Monitoring:**

- Integrated water level, temperature, and electrical conductivity sensor

## **Advanced Monitoring**

- Water level, temperature, and electrical conductivity sensor
- Meteorological station
  - Provides data to calculate daily water losses via evapotranspiration
  - Includes solar panel, battery, lightning rod, and sensors for temperature, barometric pressure, relative humidity, rainfall, wind speed and wind direction, and solar radiation
  - Data logger with cellular modem for communications
- Heat dissipation probes
  - Measure soil moisture potential (dry range) at depth
  - Planned placement at depths of 2, 4, 8, and 16 meters
- Advanced tensiometers
  - Measure soil moisture potential (wet range) at depth
  - Planned placement at depths of 2, 4, 8, and 16 meters
- Monitor well with groundwater level datalogger (selected sites)
- Soil settlement anchors
  - Measure shrink-swell response of soil to moisture content changes
- Time lapse camera

All equipment installation and site access will be coordinated with landowners to minimize disruption to soil, vegetation, livestock, or crops