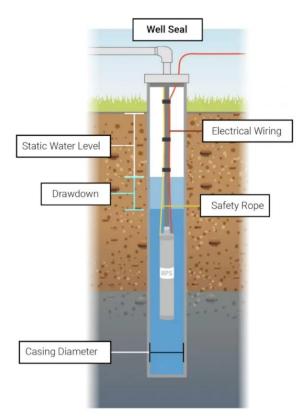


# Standard Operating Procedure Measurement of Static Water Level in Borewell

Accurate measurement of Static Water Level (SWL) in borewells is essential for groundwater resource management and sustainable water use.

## **Static Water Level (SWL)?**

The depth of the water table in a well when no water is being pumped, indicating the level of water at rest in the well.



#### **Importance of SWL Measurement**

**Groundwater Assessment**: Monitoring static water levels helps in assessing the availability of groundwater resources.

Water Quality: Changes in static water levels can indicate potential contamination or changes in water quality.

**Aquifer monitoring:** Understanding the static water level is essential for evaluating the sustainability of aquifers and their recharge rates.

### **Required Equipment:**

Water Level Indicator (WLI)

Measuring Tape

Well Cap Removal Tools

GPS Device/ Mobile app

Log book/Data Sheet

Torch/Flashlight

#### **Measurement Procedure Step-by-Step**

## 1. Preparation

- Ensure the borewell is not in use for at least 2 hours to stabilize the water level.
- Open the borewell cap using appropriate tools.

## 2. Initial Setup

- Turn on the Water Level Indicator
- Slowly lower the probe into the well, holding the tape reel steady.

#### 3. Detecting Water Contact

- The WLI will beep or show light when the probe touches water.
- Note the tape marking at the ground surface at this point.

#### 4. Verification

- Take at least two readings to ensure accuracy.
- Average the readings if there is slight variation.

# 5. Recording Data

- Log Date & time, Location, SWL reading, Technician's name, and Observations

Date	Location (GPS)	SWL (m)	Elevation (m)









Selection of Borwell

Water level Indicator Measuring
Step-by-Step Procedure of SWL measuring

Data Recording

## **Troubleshooting**

Issue	Cause	Solution
No beep /light from WLI	Dead battery or faulty probe	Check battery or replace probe
Inconsistent readings	Tape not held steady	Take multiple readings
Obstruction in well	Debris or broken casing	Stop insertion, report issue
Water level not detectable	Water too deep or dry well	Use longer tape or declare dry

#### **Additional Notes**

- If water levels are unstable, wait and retake measurements.
- Calibrate WLI periodically.
- Record environmental factors that may impact water levels, such as nearby water bodies.
- Digital logging is recommended for long-term tracking.



## **RAYALASEEMA WATER INITIATE (RWI)**

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