

# Aquifer Storage and Recovery (ASR) Technology for Recharging Groundwater



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The technique of storing surplus good quality water into the aquifer and pumping it during periods of high crop water requirements is called Aquifer Storage and Recovery (ASR). The same well bore is used to store water in the aquifer, which is being used for pumping groundwater. ASR techniques are cost effective alternatives aimed at storing surplus water during flood periods and recovering it during times of water shortages. These techniques provide an option to the farmer like **water bank deposit** especially where groundwater is brackish.

### ASR Findings / Conclusions

ASR recovery efficiency was found to be 80% for injected volume of 51 m<sup>3</sup>; 91% for injected volume of 71 m<sup>3</sup> and 98% for injected volume of 99 m<sup>3</sup>, up to 3 dS/m.

The recovered time was found to be 70% of injected time for injected volumes of 51, 71 and 99 m<sup>3</sup>, respectively.

Aquifer Storage and Recovery (ASR) technology has the potential to store water during period of surplus water and use it during peak hour demand while using the same bore hole.

