

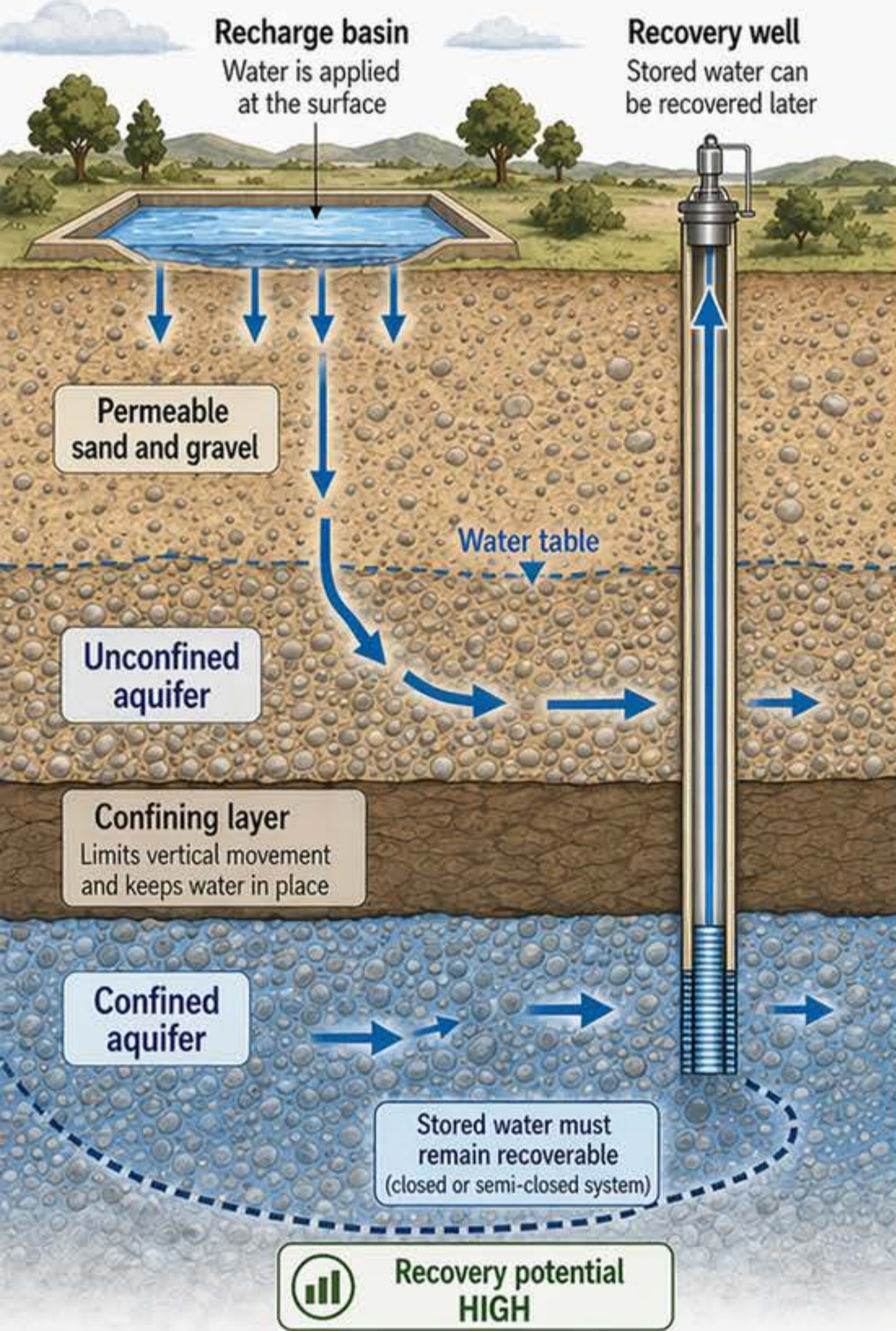
How Geology Determines Whether MAR Will Work

Managed aquifer recharge (MAR) works best where geology allows water to enter, be stored underground, and be recovered later.



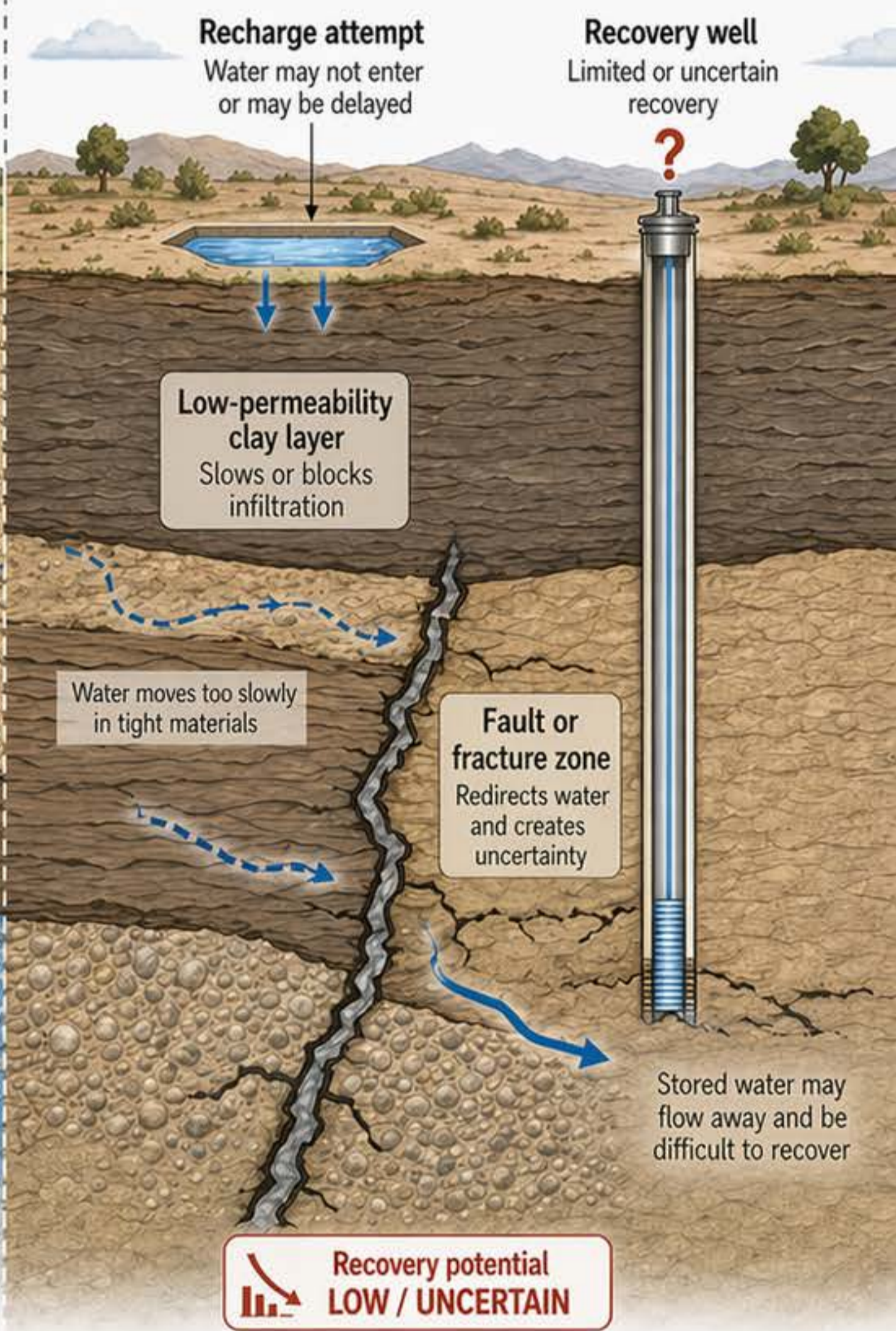
MORE SUITABLE FOR MAR

Geology supports recharge, storage, and recovery



LESS SUITABLE FOR MAR

Geology limits storage and makes recovery uncertain



More suitable for MAR

- Permeable materials
- Storage space in the aquifer
- Water can be recovered later
- Groundwater flow can be predicted and monitored

Less suitable for MAR

- Thick clay layers
- Water moves too slowly or too quickly
- Stored water may flow away
- Faults or barriers create uncertainty



Policy takeaway: MAR is a geology-dependent water strategy. A suitable aquifer must be able to accept, store, and release water.