

Groundwater Subsidence in California

Source: Nature

Recently, a study reveals that **California's San Joaquin Valley** has been **sinking at a record pace** due to overpumping groundwater, with some areas experiencing declines of over one foot per year since 2006.

- The **Valley** has a history of subsidence, with significant land sinking occurring from 1925 to 1970 due to aggressive **groundwater pumping**.
- Researchers employed interferometric synthetic aperture radar (InSAR) to accurately measure land elevation changes.
 - This technology allows for frequent monitoring of subsidence across large areas, providing valuable data for addressing the issue.
- Land Subsidence:
 - According to the <u>NOAA</u>, <u>land subsidence</u> is sinking off the ground because of underground material movement.
 - **Overexploitation of underground resources,** such as water, petroleum and minerals, decreases pore pressure and increases effective stress, causing ground subsidence.
 - <u>Flood-managed aquifer recharge</u> strategies can mitigate subsidence by recharging aquifers.
- Land Subsidence in India: <u>Joshimath sinking</u>



Read more: Land Subsidence in Chenab Valley

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