

Sinking land is a growing problem in the San Joaquin Valley

Gene Haagenon, KFSN (Fresno television), 9-23-14

A new study from UC Davis says land subsidence, or sinking ground is speeding up in the Central Valley. The land is sinking at the rate of about one foot per year, primarily because of the reliance on well water by farms.

Groundwater pumping has accelerated because of the drought and a resulting lack in surface water supplies

The sinking ground can make supplying surface water more difficult. As the land under canals sink, they become uneven, and can force water to flow uphill.

Sack Dam is located on the west side of the Valley, where Fresno, Madera and Merced counties come together. The dam was first built in the late 1800s to divert the flow of the San Joaquin River into irrigation canals. Now, Chase Hurley of the San Luis Canal Company says the dam is below the level of the canal.

"So the dam is sinking, the canal is staying at its original level, and it's having to push water uphill to get into my canal," he said.

Hurley says a plan is in the works to divert and excess water to nearby farm fields to eventually raise the level of the land. However, that is dependent on wet weather returning. The other solution might be a \$10 to \$15 million pumping plant, to move the river water up into the canal.

A few miles away, sinking land is causing another problem. The East Side Bypass is a craggy dried out stream bed created to handle overflows from the San Joaquin River is no longer level and is uphill in places. When it fills with water again, Hurley says there could be trouble.

"The next time we get floodwater, right where we are standing, there is the potential that water could go over the top of the levees," he said.

Crops, roads and buildings would be threatened. One animation shows what's going on all over the Valley. Sinking land is expected to start causing major problems for canals, roads and buildings.

James Borchers, a hydrologist at UC Davis co-authored a new study which shows sinking land, or subsidence is a bigger problem than many realized and is causing up to \$2 billion in damage to canals and water delivery systems.

The study notes subsidence has accelerated in recent years to about a foot a year as farmers have had to pump more water.

Borchers believes the new groundwater management plan that was signed by Gov. Jerry Brown last week is a good first step. He notes the state quit monitoring the impacts of land subsidence, caused by groundwater pumping 35 years ago.