

SINKING VALLEY LAND COMPLICATES WATER ISSUES

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November 24, 2013

Record Columnist

Today: That sinking feeling.

The Valley's ground level sank almost 1 foot a year over the past few dry years, geologists announced last week, more than 1,200 square miles south of Merced.

The sinking - or subsidence - is minimal around Stockton. It is worst around a hamlet called El Nido (pop. 330, elevation 141 ft.). The poor guys who live there have to change their elevation sign every year.

The reason for the sinking is groundwater overdrafting. They're depleting the aquifer, which is groundwater in geological formations undergirding the Valley.

Think a stack of giant clay pancakes with water in between. As the water is removed, the pancakes collapse onto each other. Permanently. And we go down.

My first thought upon reading this news (after "Uh-oh") was of the 2005 book "Collapse: How Societies Choose to Fail or Succeed," by Jared Diamond.

Diamond theorized in that book why civilizations fall to ruin. One reason is unintended ecological suicide - ecocide. He divided ecocide into eight categories.

They are: deforestation and habitat destruction; soil problems; water management problems; overhunting; overfishing; invasive species; human population growth; and the increased per capita impact of people, by which I take it to mean our growing individual footprints and consumption.

When you tick off that list, it seems the Valley fits every category (!).

I don't want to be Chicken Little here. Diamond wasn't doom-saying. He was saying modern humans should not underestimate their environmental problems.

Which, if El Nido is sinking a foot a year, we have done.

But then, our water problems are complicated. There is a drought. Farmers turn to the Delta for water. But too much water export is killing the Delta. So the courts curtailed exports.

Also, water system managers hold water back in reservoirs just in case the drought does not break; still less water for farmers.

Farmers face a choice. They can fallow land, buy costlier water elsewhere or pump groundwater.

Here's where it gets tricky. One of the causes of the oversucking of groundwater is farmers planting more high-value crops. Crops that slurp more water.

So a choice by south Valley farmers - arguably, to plant the wrong crops - is one factor literally sinking the Valley.

If it really is a choice. Is it what they have to do to cover their overhead as costs rise? Or do they just, you know, want to make a lot of money?

I cannot say.

Of the profit motive, Gayle Holman, a spokeswoman for the Westlands Water District, which numbers 700 farms, said, "I think any business entity, regardless, that's the goal. The goal is to bring as much success as you can. That's the American way."

(Note to self: Send all the little kiddies of the Westlands copies of "The Lorax.")

I don't mean to single out Westlands. Valley agriculture and growth have long been fundamentally out of whack with Valley resources. We've been sinking the Valley for decades.

The pioneers who first punched wells through the clay didn't need pumps; so tight-packed was the water underground, it sprang to the surface.

But over the years, we sucked so much out that from 1925 to 1980, the Valley dropped 30 feet in the Madera area. Thirty feet - that is weird and scary.

Opening the California Aqueduct in the late 1970s changed the picture. Farmers who got surface water didn't need to pump groundwater. Subsidence abated.

But growth, drought, regulations, etc., have limited surface water and kicked in the pumping again. Besides, El Nido is not near a canal. Those farmers are always pumping.

What's going on here appears to be a crisis/zzzz mentality. Oh, wow, there's a crisis! Let's monitor groundwater, change policies, engineer solutions.

Then, zzzz, there's no crisis. And we forget about subsidence until it surprises us in a new place. (Suggested city slogan: "El Nido: Where the Future is Looking Down.")

"If we had just had some basic monitoring going during all this time, we could have seen this problem coming," said Michelle Sneed, a federal hydrologist who co-authored a subsidence study. "Even bare-bones monitoring."

OK, there's your policy prescription. Now as for Stockton: by securing New Melones water and building the Delta Water Supply Project, the city actually halted its groundwater overdrafting.

But don't get cocky. As near as Oakdale, the irrigation board chief recently said of the groundwater: "Disaster is imminent."

That sounds like a sinking feeling to me.

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