



Consultant, geologist provide insights to Smart Coast California members

About 80 REALTORS® and AOR staff were briefed on the science of sea level rise by a leading expert in the field as well as a report on the progress that the Smart Coast California program has been making during the Coastal Issues Group Zoom meeting on October 5th.

Dr. Gary Griggs, distinguished professor of earth sciences at UC Santa Cruz, told the group that there's no doubt that temperatures have been steadily increasing since the 1940s and that sea levels have been rising along with them.

"The shoreline is one of the most important lines on the planet," Griggs said. "It's where most of the world's people live and where some of the most desirable property is. But after 8,000 years of relative stability, it's now moving toward us because of sea level rise."

That 8,000 years of stability has been an anomaly in geological history. As the planet warmed and cooled over the millennia, sea levels have at times been 400 feet lower than they are today, meaning the California shoreline was as much as 10 miles further out to sea than it is today during the depths of past ice ages as up to 10 million cubic miles of water was locked up on land as ice.

But during the warmest periods in the glacial cycles, sea levels were some 20 feet higher than they are today. At this point, precise satellite measurements possible since 1993 show that sea levels are rising by about 4.5 mm per year, or 18 inches in 100 years – but there are indications that the rate is increasing. By 2100, scientists project that sea levels will range from 1.6 feet higher than today at the extreme low end to as much as 10.2 feet higher in an extreme case, with the likely range between 1.6 and 3.4 feet.

Griggs said there are two kinds of areas particularly at risk – low-lying coastal plains that can easily flood in the right circumstances and sandy cliffs, bluffs, and dunes that can erode more quickly with higher sea levels. Both happen periodically today.

"The point to keep in mind is this is not going to occur tomorrow. But there will come a point with further sea level rise that will affect each area, and we need to start thinking about what will happen 30 or 40 years in the future," he said.

There are four basic options:

- Wait and see what happens
- Beach nourishment
- Increased armoring of the shoreline with seawalls and revetments
- And relocation – planned or unplanned retreat.

He said simply adding tons of sand to existing beaches usually only works for a couple of years before its washed away. And while groins and artificial reefs can be effective, he said the era of hardening the shoreline is essentially over because the Coastal Commission's position is that anything built after 1977 can't be protected. That's despite the fact that 14% of the coast – and 38% of the Southern California coast – is hardened in one form or another.

As for communities that choose not to respond, he warned insurance companies may have the last word. Particularly on the low-lying East Coast, they are beginning to deny coverage for high-risk coastal homes and without insurance, banks won't make loans.

But while Griggs supported forms of managed retreat, dismissing the value of replenishment and said artificial reefs are expensive, Smart Coast California consultant Don Schmitz said alternatives to managed retreat can be effective.

“It’s not all or nothing – deniers or managed retreat,” Schmitz said. “We believe artificial reefs are an important part of the toolbox and that you can do beach nourishment and protect private property.

“There’s middle ground here and science to determine how fast this will happen if it will happen at all. The vast majority of the state’s coastline is undeveloped, places like Big Sur and much of Northern California. We’re talking about communities that are established – places like San Diego, Laguna Beach and Santa Barbara that are hugely important from an economic and cultural standpoint. What are we going to do about those communities that are already there?”

Since coming on board in February Schmitz said he had been meeting with public officials, making presentations to city councils, boards of supervisors, and business groups, and working on building coalitions with coastal property organizations.

As a result, he said, “we’re starting to get a name as a resource for cities and counties to reach out to. That’s a really important aspect because we want to have a seat at the table.”

Another SCC priority has been providing assistance to AORs and their GADs. Among the AORs helped have been San Mateo, Santa Cruz, Ventura, San Clemente, Half Moon Bay, and Santa Barbara.

“Local AORs and GADs carry the water. We’re available to back you up. We can do analysis on policies and recommendations and feed them to you. At the end of the day, what’s most important is for individual REALTORS® and organizations to weigh in. No one knows a community better than the REALTORS® who have been working there for years,” he said.

In addition, the smartcoastca.org website is now up and running and AORs are encouraged to send articles about sea level rise issues that can be posted there by emailing them to info@smartcoastca.org.

While the Coastal Commission’s view is that the Coastal Act prohibits action to protect structures and areas developed after the act went into effect in 1977, Schmitz disagrees.

“The Coastal Commission wants to only consider businesses and residences there before 1977 as worthy of protection. But the Coastal Act doesn’t say that – it says existing development,” he said. There has been litigation over that arbitrary cut off, but it’s not resolved yet, with Schmitz saying eventually there will be published case law that will be very important.

In the meantime, he said it’s a huge point of contention. Last month, the commission’s staff wanted to take the definition back to 1977 when considering San Clemente’s LCP, but the city disagreed. Staff compromised a little, but the issue was such a poison pill that the city council pulled the plan back from further consideration.

In the end, the fact SCCa is up and running is hugely important, noted President Matt Capritto, who quoted the old Sacramento adage that if you’re not at the table, you’re probably on the menu.

“This gives us a seat at the table,” he said.