EDITORIAL

by James Buckley

"Swiss Nets" to the Rescue

In an exquisitely crafted 2006 article about debris flows written for *Canyon Voices* and specifically about the nature of Rattlesnake Canyon, **Karen Telleen Lawton** wrote: "Barely a thousand years ago – a second on a geologist's watch – a rainwater and boulder slurry called a debris flow surged through [Rattlesnake Canyon], strewing its 10 million cubic yards of rocky bilge into what is now the city of Santa Barbara." Illustrating Ms Lawton's historical point is a map outlining the perimeter of the flow that stretches out in a delta centered upon what is now Skofield Park and encompassing today's Botanic Gardens, Mission Canyon, and Rocky Nook Park. Years before, other debris flows and landslides helped to create what is now Santa Barbara.

Karen quotes a *Santa Barbara News-Press* article, whose author, Dr. **Edward Keller**, described what occurred at Rattlesnake Canyon a millennia ago as "a flood of boulders roaring downstream at speeds up to fifty miles per hour."

Sound familiar?

"Debris flows," Ms Lawton wrote (12 years ago), "are a threat following the periodic wildfires of Southern California, but this event was about a thousand times the norm."

So, mud-and-debris flows are and have been common occurrences in this area over the years. When I first began publishing *Montecito Journal* in 1995, Maria Herold and David Myrick were Montecito's resident historians. Maria often entertained me with stories of how Montecito's various "creeks" had changed course during heavy rainy seasons, pointing out in particular the flow that runs from Montecito Peak down through Riven Rock, alongside Parra Grande, and continuing down Hot Springs to Olive Mill Road turning at Casa Dorinda, before depositing its flotsam on Butterfly Beach and heading out to sea. Maria or Mr. Myrick would point to what looked like a berm up near, say, Ashley Road, and suggest it had been the border of San Ysidro Creek. Long ago, I imagined, but was told that over the relatively short span of 100 years or so, the creek's course had changed half a dozen times.

As it has again, most recently.

Our forebears carved a village out of an extravagantly attractive corner of the California coastline situated between an unusual east-to-west section of 4,000-ft mountains to the north and the blue Pacific Ocean to the south. It's called Montecito ("Little Mountain"), and it's that mountain and its proximity to the ocean that gives us one of the most pleasant year-round climates on this planet. Unfortunately, that mountain has also been the proximate cause of recent disasters, including the tragedy of January 9 that took the lives of 22 friends and neighbors and destroyed or damaged nearly 10 percent of all the homes in Montecito.

Time is Critical

As a result of the Thomas Fire, Montecito doesn't even have to think about fire danger for the next 20 years, certainly 15 at a minimum. Within three to five years – once vegetation returns in abundance – we'll also be safe from a possible debris flow. That leaves us with three to five rainy seasons during which we'll worry about a heavy rain. Insurance coverage will continue to be a problem for the short term.

But, we can change all that. Last week, we discussed the possibility of installing "Swiss nets" (flexible shallow landslide barriers) in our backcountry. The more we think about it, the more we realize it is the *only* thing we can do immediately. These reinforced, lightweight steel devices are prefabricated and, according to the manufacturer (Geobrugg North America's plant is in Algodones, New Mexico) "can be flown in by helicopter to even the most inaccessible sites." The company also boasts that "Installation requires no heavy construction machinery," that "anchoring requires just a lightweight drilling carriage and weight-saving tie rods," and that "no large-scale earthwork or access roads are required." The installation, we are told, blends into the landscape and is "hardly visible from a distance."

These devices are used extensively in Switzerland, where receding glaciers have exposed villages and towns to mountain debris. They are also in use in Scotland, Sicily, the state of Washington, and closer to home, in Camarillo. They have proven effective in controlling and preventing large-scale debris flows.

Since it is thanks to Montecito resident **Les Firestein**, who first alerted us to this product, our suggestion is to put him in charge of the effort to get a series of such nets installed before the beginning of this year's rainy season. Which means, of course, that he and we have to get on it now. •MJ