

Beware dangerous mudslides as autumn kicks in

Thomas M. Kostigen, Visalia Times-Delta, 11-08-14

Dangerous mudslides, or debris flows as they're technically defined, are increasingly likely this time of year when the weather turns wet.

Just one-quarter inch of rain in an hour can trigger a mudslide, and in mere seconds cause damage and death.

Take the La Conchita, Calif., mudslide in 2005 that killed 10 people and damaged or destroyed about 36 homes. It took just 15 seconds to mobilize about 40,000 cubic yards of debris more than 1,100 feet.

The California slide was the deadliest in U.S. history until the one in Oso, Wash., earlier this year that killed 43 people after it engulfed a whole neighborhood and covered a full square mile.

The start of the autumn equinox earlier this week signifies more than just a change in daylight. It also means precipitation patterns throughout the country shift, bringing heavy rains to the Pacific Northwest and drier conditions to the Southeast.

The West Coast is particularly susceptible to slides because of its geography. Coastal areas, mountains and canyons are ideal environs for mudslides.

In addition, droughts and wildfires increase the chances for slides because they weaken soil, impeding its ability to hold water and allowing precipitation to skid over its surface. That could be bad news for California, which is in an extended period of mega drought and massive wildfires.

Over the past two years, Colorado wildfires scorched acres upon acres, and subsequent rains produced massive slides that swept cars down roads and highways.

As a result of the threats, the U.S. Geological Survey and National Weather Service teamed up to create a flash flood and debris flow early warning system. The Flash Flood Monitoring and Prediction (FFMP) system identifies when both flash floods and debris flows are likely to occur. Advisories, outlooks, watches and warnings are then issued when necessary.

Besides staying tuned for these alerts, there are other steps you can take to both thwart and survive debris flows if you live in an area susceptible to them.

The first thing to do is to evacuate the area if conditions for a mudslide threaten. Have a plan in advance of where you might go and stay until it's safe to re-enter the area.

Planting trees and shrubs can go a long way toward stemming slides. Vegetation absorbs water and strengthens soil, providing a natural defense to slides. If a slide has occurred, it is important to replant as soon as possible to fight off the chances of another one manifesting in the same area.

If conditions erupt quickly and it's impossible to evacuate immediately and safely, stay alert and awake. Many victims of mudslides are killed while sleeping in lower floors of their homes.

If you get caught up in a mudslide outdoors, look upstream. This way you can try to stay clear of large objects flowing your way. If you find yourself tumbling in the flow, protecting your head and torso are key. The best way to do this is to curl into a tight ball. If you can, keep your feet in front of you to protect yourself from crashing into large, stationary objects in your way.

And as much as you may want to, do not attempt to dig out others in precarious locations. While a heroic gesture, it means you then stand the chance of getting trapped yourself. Instead, continue to communicate with those in need of rescue and direct emergency responders to them. This is why it's a good idea to carry a storm whistle so others can locate you.

A "mudslide" may be a lighthearted sounding name, but their destructive force should be taken seriously.