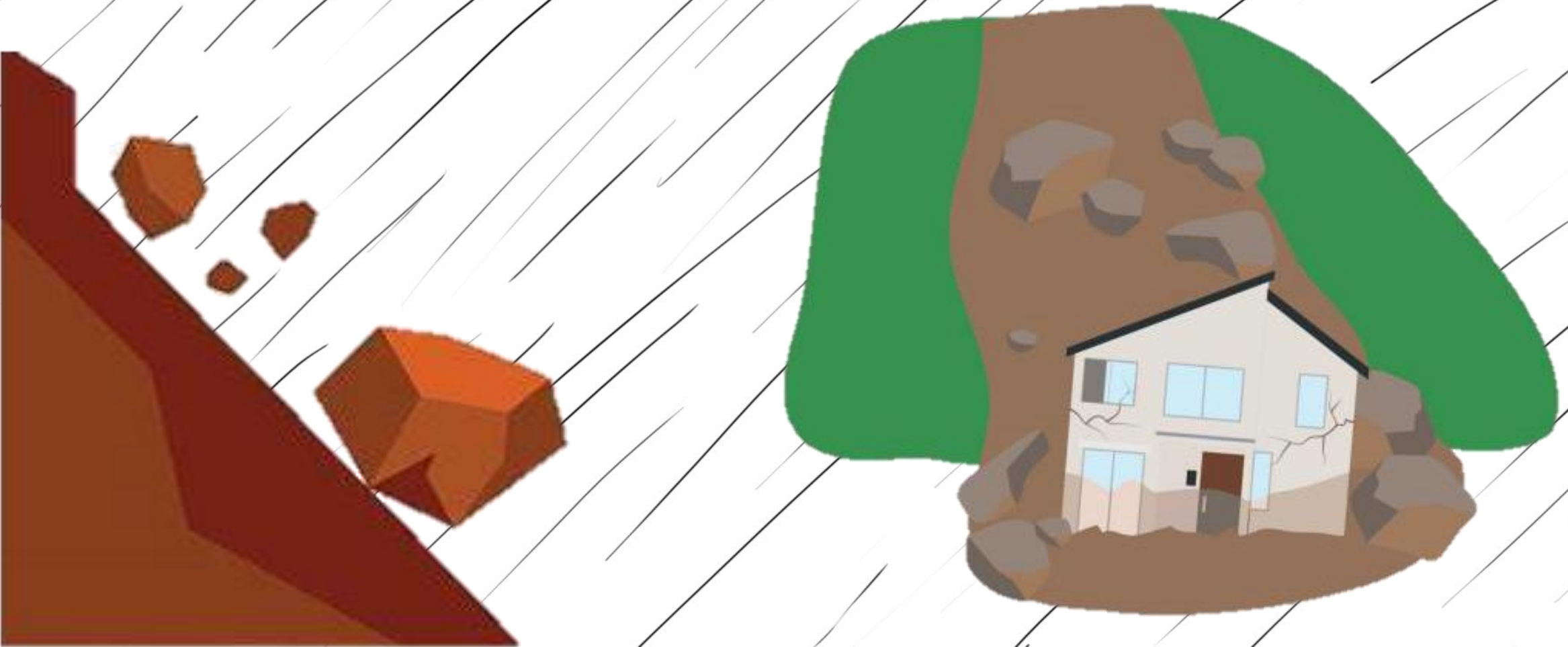
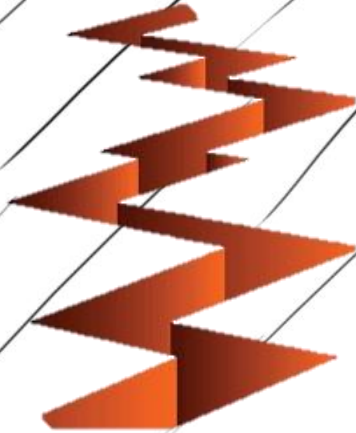


Avoiding Landslides

Service-Learning Project By Maxim Kalinkin



With strong rains and earthquakes on the rise in California, how can we prevent landslides to protect infrastructure and lives?



After seeing the image on Canvas of the devastating landslide that covered Highway 1 in California, I knew what I wanted to do for my public service announcement. In the Bay Area, I have observed small landslides from hikes and nearby hills and can only image the magnitude of their effect when they occur, in larger scale, near homes and highways.

What causes landslides?

- Earthquakes
- Water
- Wildfires
- Mass wasting



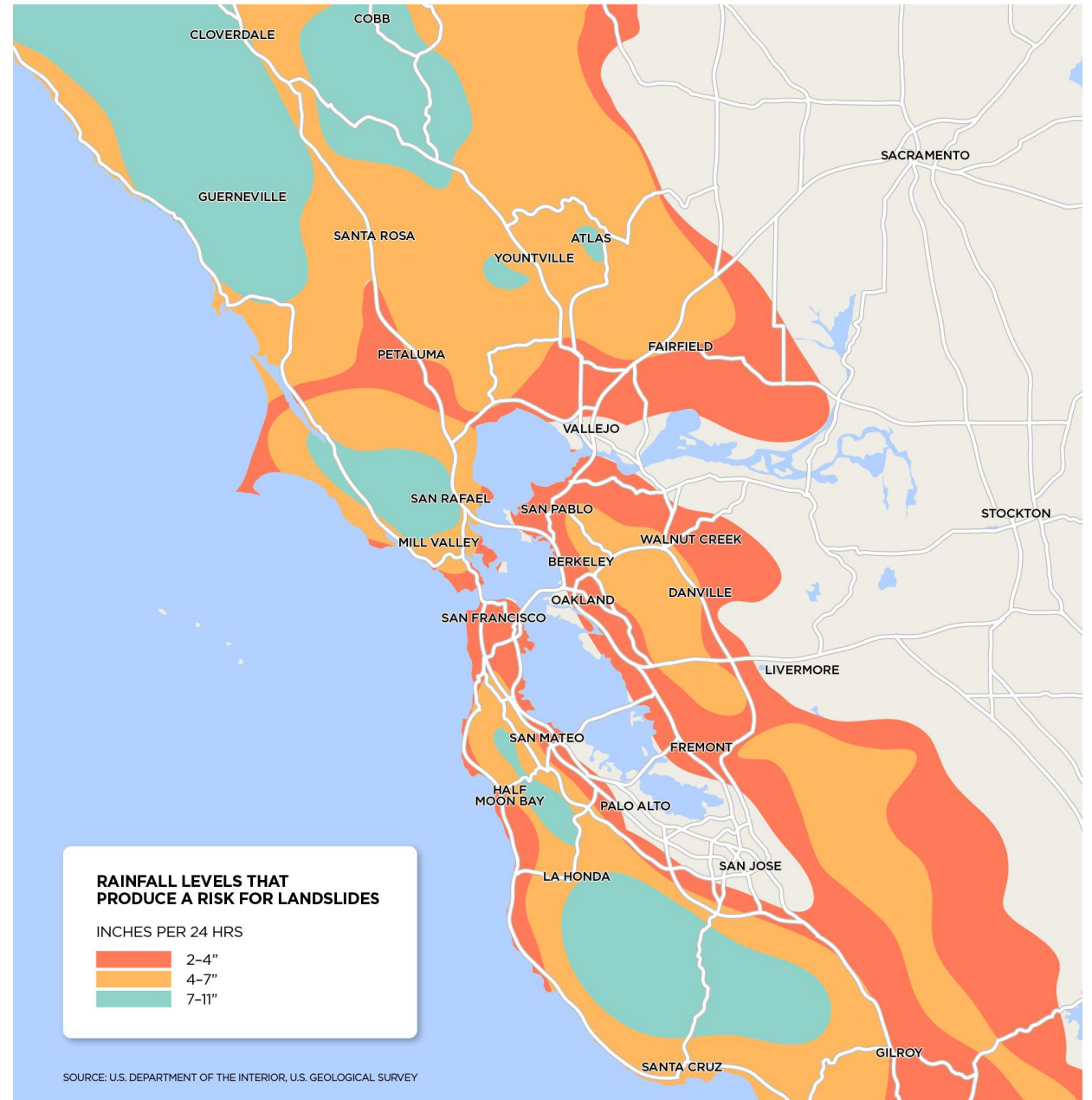
As we all know, California's is prone to periods of strong rainfall, earthquakes, and wildfires. As a result of our inaction, we fall victim to landslides.

What are the effect of landslides in CA?



Are you safe?

According to our textbook, most landslides are only several meters in size. Before we dive deeper to understand what we can do to protect our beloved infrastructure, we must analyze where landslide risk zones lie. Do you live within the boundaries of a high-risk landslide zone?



Where in the Bay are landslides happening?

According to the KQED article, landslides are not that common in mountainous regions because they have effectively absorbed water for many centuries. Instead, landslides are more likely to occur on hills with loose soil and rocks; soil that can be easily absorb too much water and become loose when the ground shakes as a result of earthquakes (Hess 461). Venton noted that a good metric for predicting landslides can be the amount of rainfall in a 24 hour period. When land has had time to dry, risk of landfall decreased (Venton). Be aware of hills with no vegetation; vegetation helps increase the structural integrity of the soil making it more resistant to landslides.

Where in the Bay are landslides happening?

Landslides are much more likely to happen along a fault line because the disturbance an earthquake can cause to the structural integrity of the soil of a hill. Do you happen to live near any one of these fault lines?



How can we reduce our risk of landslides?

- More vegetation = smaller chance of landslide
- Make sure of a drainage systems for storm water runoff
- Ensure your home foundation is on bedrock and solid soil
- Check for cracks or signs of leaning infrastructure.



Works Cited

Hess, Darrel. *McKnight's Physical Geography: A Landscape Appreciation*. 11th ed. NJ: Pearson Education, Inc., 2014. 456-64. print

“How to Avoid Landslide Hazards.” Appalachian Landslide Consultants, PLLC. <https://appalachianlandslide.com/how-to-avoid-landslide-hazards/>

Venton, Danielle. “Bay Area Landslide Risk Goes Up as Rains Pour Down.” *KQED*. 1 Feb. 2016. <https://www.kqed.org/science/499218/bay-area-landslide-risk-goes-up-as-rains-pour-down>