

# Recognizing Landslide Risk on Your Property

Landslides have the potential to cause extensive property damage. Recognizing signs of slope instability on your property can help you avoid potentially costly repairs in the future.

**If you suspect slope instability on your property, consult a licensed engineer or geologist**

## Signs of slope instability

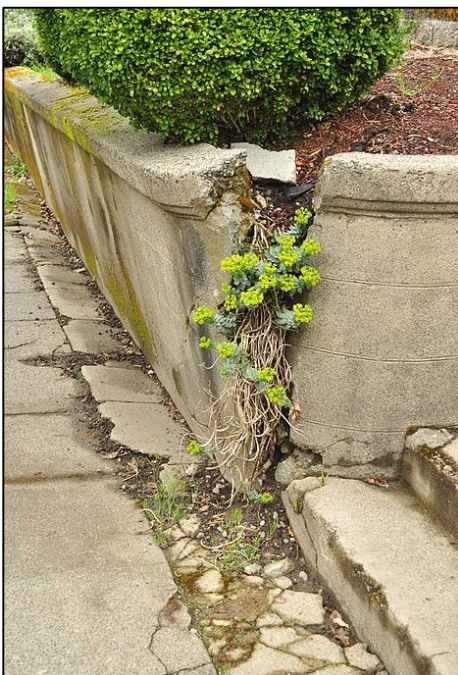
- Cracks or fissures in the ground
- Cracks in or displacement of paved surfaces
- Cracked or bent walls, foundations, and chimneys
- Tilted, warped, or cracked retaining walls
- Tilted fence posts, utility poles, signs, etc.
- Curved tree trunks, indicating soil creep
- Hummocky (irregular) topography indicating the occurrence of past landslides



Cracks in the ground (photo by J.S. Kite)



Cracks in paved surface (photo by J.S. Kite)



Tilted retaining wall (photo by Joe Mabel, license CC BY-SA 4.0)



Tilted sign post (photo by R. Yesenchak)



Curved tree trunks (photo licensed under public domain)



# Mitigating Landslide Risk on Your Property

Landslides are one of the most common natural hazards in West Virginia. They can damage buildings and roads, disrupt utility lines, and cause injuries or death. So what can you do to help mitigate the risk of landslides on your property?



- **Route water away from slopes.** Saturation of slope material increases landslide risk.
- **Keep slopes vegetated.** Tree and plant roots help stabilize the soil and reduce saturation by using soil water.
- **Consult hazard maps.** Review landslide risk maps provided by county and state organizations to see if you live in a high-risk area.



Landslides can cause extensive property damage (photo by J.S. Kite)



Water flowing over slopes can cause landslides (photo by WV Department of Transportation)



Excavating the base of slopes and removing vegetation can cause slope failure (photo by J.S. Kite)

- **Don't cut or excavate slopes.** Removing even a small amount of material from a slope can cause future failure.
- **Don't dispose of yard waste on slopes.** Lawn cuttings, yard waste, and other debris can destabilize slopes and cause landslides.



**Always consult a professionally licensed engineer or geologist before installing retaining walls, buttresses, or other mitigation systems. Improper construction techniques can increase the risk of landslides.**