Generalized Geologic Map for Land-Use Planning: Breathitt County, Kentucky

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What are the factors that cause landslides?

1. Slope steepness: Steep slopes are more prone to landslides.
2. Water: Slope stability decreases as water moves into the soil. Springs, seeps, roof runoff, gutter downspouts, septic systems, and irrigation systems can all contribute to slope instability.
3. Soil types: Soils that are thin, poorly drained, or have a high clay content are more susceptible to landslides.
4. Vegetation: The presence of vegetation can affect slope stability by providing root reinforcement and reducing erosion.
5. Geology: The underlying bedrock and soil types can influence slope stability. Certain types of rock and soil can be more prone to landslides.

What are some ways to protect landslides?

1. Drainage improvements: Installing drainage systems can help reduce the amount of water in the soil and prevent erosion.
2. Vegetation management: Planting vegetation can help stabilize slopes and reduce erosion.
3. Retaining walls: Constructing retaining walls can help prevent soil movement.
5. Floodplain management: Protecting floodplains can help reduce the impact of landslides by protecting downstream areas.

LAND USES

Intensive activity and topography.

Moderate to severe limitations for most activities excepting agriculture, development, and mining. Requires detailed analysis of different rock units and soil types.

Slight to severe limitations on most activities excepting agriculture. Requires detailed analysis of different rock units and soil types.

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