Threat Assessment 6
Landslide/Mudflow

General Situation

Landslide is a general term for a falling mass of soil or rocks; vertical movement of small pieces of soil. "Mudslide" (mudflow) is a flow of very wet rock and soil. The primary effects of landslides or mudslides can include:

- Abrupt depression and lateral displacement of hillside surfaces over distances of up to several hundreds of feet.
- Disruption of surface drainage.
- Blockage of flood control channels and roadways.
- Displacement or destruction of improvements such as roadways, buildings, oil and water wells.

The speed with which landsides can occur vary considerably from rapid rockfalls to virtually imperceptible movements down slope under the pull of gravity. Soil creep is a very slow type of earth flow movement. It occurs mainly in solids containing clay. Most landslides are shallow, ranging up to perhaps 100 feet in depth and limited in extent to generally less than 100 acres. Most are not presently in motion (active), but have moved down slope to a position of stability and have remained.

An unusual number of brush fires in hillside areas may create the potential for mudslides if heavy rains arrive before the replanting has taken hold. Situations of this nature can usually be managed by warnings to the residents and making sandbags available in advance of the predicted heavy rainfall.

Specific Situation

Both the United States Geologic Survey and the California Geologic Survey are currently conducting significant research that focuses on the conditions and processes that lead to destructive slope failures. This includes methodology for analysis of slopes and drainage basins, and the development of susceptibility maps. There are portions of hillside around Bradbury that would be susceptible to Landslide/Mudflows as a result of various events whether they be long periods of rain, exposed hillside as a result of a fire, or earthquake. The attached slope map identifies those areas in the City of Bradbury that are considered a "Landslide Zone".

Emergency Response Actions

Emergency response actions applicable to all hazards are included in **Part Two Annexes, Checklist Actions for each Section.**

Note: For more detailed information and maps, refer to the City's Local Hazard Mitigation Plan.

Attachment 1 – Slope Instability Map

Attachment 1, Threat Assessment 6
Slope Instability Maps