

**C. Rock Fall**

Rock falls are a naturally occurring erosional process in mountain areas in Weber County. As development advances higher onto the bench areas and into the canyons the risk from falling rocks becomes greater. A primary mechanism responsible for triggering rock falls is water in outcrop discontinuities. Rock falls present a hazard because of the potential damage a large rock mass, traveling at a relatively high velocity, could cause to structures and personal safety. Buildings shall be located so that structures are not positioned in an area susceptible to rock falls. When new developments cannot be designed around a rock fall path, and hazard reduction measures must be considered, a site specific plan and hazard study, with recommendations for mitigation, shall be produced by a qualified engineering geologist, submitted for review and approval by the Planning Commission. Mitigation may require design by a Utah licensed geotechnical engineer, and may include rock stabilization techniques such as bolting, cable lashing, burying, and grouting discontinuities, removal or break-up of potential rock clasts, as well as deflection berms, slope benches, and rock catch fences to stop or at least slow down falling rocks. Strengthening a structure to withstand impact is an example of modifying what is at risk. Mitigation problems can arise when rock source areas are located on land not owned by the developer.

In areas where the rock fall hazard is present but very low, disclosures of potential hazards to land owners and residents with an acknowledgment of risk and willingness to accept liability may be an acceptable alternative to avoidance or mitigation for single family residences.