Protecting Talus Fields

Date: August, 1999

Application: All west-side forest ecosystems managed under the Habitat Conservation Plan, including the Olympic Experimental State Forest Planning Unit.

DISCUSSION

This procedure defines protection strategies for natural talus field ecosystems when management activities are conducted adjacent to or around talus fields. The Habitat Conservation Plan (HCP) defines talus as a homogenous area of rock rubble ranging in size from 1 inch to 6.5 feet in size. Talus fields usually develop at the base of cliffs or steep hill slopes as the forces of gravity act upon disintegrating rock. Talus fields provide essential habitat for some wildlife species, such as the Dunn's, Van Dyke's, and Larch Mountain salamanders and pika, and are preferentially used by other species of vertebrate and invertebrate wildlife. While protecting these ecosystems is important, it is also important to recognize that some management activities, such as road building, might have relatively less impact (as compared to other ecosystem types) when located on the more stable slopes of talus fields. Therefore, careful thought must be given to the overall long-term benefits of alternative road or management activity location options.

The main objectives for protecting talus fields include minimizing disturbance and changes in microclimate. The talus protection strategy will incorporate an evaluation of each talus slope's contribution to the landscape's habitat objectives and a site-specific plan of all management activities in or around the talus fields. Subsequent management activities will then be designed and conducted to minimize disturbance and microclimate changes.

The HCP requires protecting non-forested talus fields that are greater than or equal to one acre in size in most of the west-side planning units. However, in the Columbia Planning Unit, protection is required for talus fields that are greater than or equal to 0.25 acre in size, except for the western half of the Siouxon Block and two isolated parcels near Highway 12 where the one acre size is in effect. Additionally, the HCP permits limited timber removal on forested talus.

Prior to full implementation of the HCP, protect known talus fields during management activities.

Action

(1) Avoid road construction through talus field and buffers. (The Engineering Division is developing road management procedures.)

(2) Obtain region manager approval for road construction and design when routing through talus fields or buffers can not be avoided.

(3) Avoid rock mining from talus fields and associated buffers when mining in alternate locations can be accomplished in a practicable manner that is consistent with other objectives of the comprehensive landscape-based road network planning process.

(4) If the proposed management activity includes forested talus (greater than 30 percent canopy closure) retain at least 60 percent canopy closure when harvesting within the buffer.

(5) If the proposed management activity is within 100 feet of non-forested talus fields (exposed talus with canopy closure less than or equal to 30 percent) incorporate the following conservation measures into the management activity:

- Do not harvest timber in talus fields greater than or equal to 1 acre in size.

- Do not harvest timber in talus fields greater than 0.25 acre in size in designated spotted owl nesting, roosting, and foraging and dispersal habitat management areas in the Columbia Planning Unit, except for the western half of the Siouxon Block and 2 isolated sections near Highway 12 where no timber harvest will occur in talus fields greater than 1 acre.

- Establish a 100-foot wide timber buffer, measured from the edge of the non-forested talus field (i.e., where canopy closure first exceeds 30 percent).

- Protect the integrity of the talus field when yarding within the buffer.

- Retain at least two-thirds of the standing timber volume during each harvest rotation on forested talus not located in the talus buffers.

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