

**BIOLOGICAL ASSESSMENT
FOR POWDERHORN RESORT'S
MASTER DEVELOPMENT PLAN,
PHASE 1 ENVIRONMENTAL ASSESSMENT,
MESA COUNTY, COLORADO**

Prepared for:

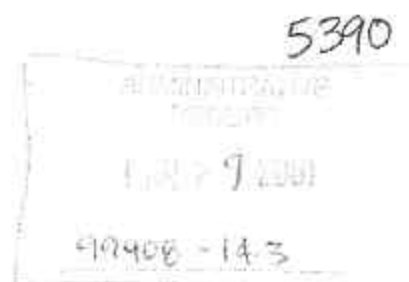
U.S. Forest Service

*Grand Mesa, Uncompahgre, and Gunnison National Forests
Grand Valley Ranger District
2777 Crossroads Boulevard #A
Grand Junction, Colorado 81506*

and

SE Group

*610 Main Street
Frisco, Colorado 80443*



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Western Ecosystems, Inc.

Ecological Consultants

905 West Grand Street, Suite 200 BO302 (303) 442-6144

In summary, the 39.3 AP of depletions to the Gunnison River that would occur under Alternative D have not gone through USFWS section 7 consultation (USFS 1997). Implementation of Alternative D would, therefore, be **likely to adversely affect** the four big river fish. However, the magnitude of this potential affect is so inconsequential that compensatory mitigation would not be required by the USFWS. Recommendations are provided below in Section 8.2 to mitigate this affect.

North American Lynx

Powderhorn 4b

Lynx are absent on Powderhorn Ski Area and on Grand Mesa. However, suitable, but vacant habitat that might be inhabited by future lynx as part of a recovered population is present and has been evaluated with respect to affects resulting from the implementation of Alternative D. Alternative D would have virtually the same affect on potential future lynx habitat as Alternatives B and C, described above.

Practically, there would be no difference between any of the alternatives on lynx because lynx are not present on Grand Mesa. Alternatives B, C, and D would have greater affects on lynx habitat than Alternative A as a result of forest conversion to ski trails, greater human activity during the ski season, and a slight increase in dispersed summer recreation indirectly resulting from additional base area development. Alternatives B, C, and D would result in a loss of effective foraging and security habitat within the developed ski area. Effective denning and travel habitat would be unaffected.

From a theoretical future perspective, assuming that lynx colonize and inhabit Grand Mesa at such a density that a home range would encompass PSA (including suboptimal habitats that have little value to lynx and where most upgrading modifications would occur), there would be no clear difference between Alternatives B, C, or D. All propose about the same acreage of habitat modifications. Alternative D would result in only 6.1 acres of mature spruce-fir forest compared to 12.9 acres under Alternatives B and C. Considerations between these alternatives largely focus on potential movements across the ski area, since effective denning habitat is absent and foraging values are limited to upper elevation conifer stands. Alternatives B and D would potentially have a greater affect on lynx movements during the 3.6 month, December 13 to April 5 (mean opening to closing dates), ski season as a result of the additional noise and activity associated with expanded snowmaking coverage and associated activities, although there are no scientific studies to support or refute that contention. Conversely, Alternative D may have less affect on movements as a result of glading if, as is suspected (but undocumented), glading facilitates movements across ski trails. However, the potential benefits and disadvantages of one alternative versus the other is probably moot because existing and proposed trails are relatively narrow, lynx are known to cross ski areas, PSA is relatively narrow and well within the ability of a lynx to cross, and lynx could avoid cross the ski area entirely by moving above the ski area along West Bench.

Based on results of the HABCAP analysis, potential habitat capability for lynx in the DU would continue to exceed the desired viability threshold, although Alternative D would incrementally reduce the habitat potential.

The LAU analysis indicated that while the implementation of Alternative D would conflict with the 70% suitability standard (Ruediger et al. 2000), the permanent loss of 9 acres, 0.08% of the 11,305 acres of suitable habitat in the LAU would have no effect on potential long-term lynx habitat use or viability within or beyond the LAU. Within the next 20 years, large areas of aspen on PSA and in the DU, now