

Lost Trail 3

168 acres, respectively. Another 0.46 miles of road would be built on private land. About 200 acres of long-term loss of suitable lynx habitat is proposed, primarily foraging habitat. This results in a 1% loss of potential suitable lynx habitat in each of the 2 ski resort LAUs increasing lynx habitat in unsuitable condition to 5% and 7%.

Maverick Mountain ski resort proposal increases ski runs by 45 acres and base facilities by 10 acres. Although small in acreage, this would increase unsuitable lynx habitat acres from 1% to 2% of one of the LAUs. The other LAU has very minor changes and would not result in a reduction of lynx habitat condition in the LAU.

Big Mountain, Lost Trail, Great Divide, and Maverick Mountain proposals result in changes in suitable to unsuitable habitat condition in the LAUs affected by the ski area as well as a change in total acres of lynx habitat affected on federal land. However, based on analysis of direct, indirect, and cumulative effects to lynx, of the three, only Big Mountain and Lost Trail received a "likely to adversely affect lynx" determination by Forest biologists (BA).

STATUS OF THE SPECIES/CRITICAL HABITAT

Species status

In 1998, the lynx was proposed for listing as a threatened species under the Act (63 FR, July 8, 1998). The lynx in the contiguous U.S. were listed as threatened effective April 23, 2000 (65 FR 16052, March 24, 2000). The Service identified one distinct population segment in the lower 48 states. At least one of five listing factors must be met for listing under ESA. These factors include: present or threatened destruction of habitat or range, over-utilization, disease or predation, inadequacy of existing regulatory mechanisms or other natural or human-made causes. The sole factor that caused the lynx to be listed was inadequacy of existing regulatory mechanisms, specifically related to the lack of Forest Land and Resource Management Plans to address the needs of lynx. Critical habitat has not been designated for the lynx.

The information in subsections that follow is largely excerpted from the LCAS.

Species/habitat description and life history

Lynx are medium-sized cats, 75-90 cm long (30-35 inches) and weighing 8-10.5 kg (18-23 pounds) (Quinn and Parker 1987). This is the only lynx species in North America. They have large feet adapted to walking on snow, long legs, tufts on the ears, and black-tipped tails. Their historical range extends from Alaska across much of Canada (except for coastal forests), with southern extensions into parts of the western United States, the Great Lakes states, and New England (McCord and Cardoza 1982). Lynx feed primarily on snowshoe hare but will also prey on small mammals and birds. The lynx breeds in the spring of the year (April or May) and produces a litter of two kittens on average.

Snowshoe hares (*Lepus americanus*) are the primary prey of lynx, comprising 35-97% of the diet throughout the range of the lynx (Koehler and Aubry 1994). Other prey species include red squirrel (*Tamiasciurus hudsonicus*), grouse (*Bonasa umbellus*, *Dendragapus* spp., *Lagopus* spp.), flying squirrel (*Glaucomys sabrinus*), ground squirrel (*Spermophilus parryii*, *S. richardsonii*), porcupine (*Erethizon dorsatum*), beaver (*Castor canadensis*), mice (*Peromyscus* spp.), voles (*Microtus* spp.), shrews (*Sorex*

BIOLOGICAL EVALUATION
(includes Biological Assessment for bull trout)

FISH SPECIES

Lost Trail 3b

Step 1 - Prefield Review

There were some fisheries inventories done in the Camp Creek area by The Montana Fish, Wildlife and Parks (MTFWP) and by the Forest Service in 1990-1992 to confirm the presence and abundance of westslope cutthroat trout and bull trout. It was decided that additional data was needed on fish distribution and numbers for the Camp/Reimel Integrated Resource Analysis Area, and for this project.

Step 2 - Field Clearances and Surveys

The MTFWP, the Forest Service and Montana State University have surveyed all of the small drainages in the project area to determine fish distribution and species, (see the map in the project file). Again this survey work confirmed the presence of westslope cutthroat trout and bull trout in the analysis area. There are also some rainbow, brook, brown, and hybrid trout in the main East Fork of the Bitterroot River and the larger tributaries. Genetic testing has shown that most of the cutthroat trout in the area are pure westslope, but there is some cutthroat X rainbow mixing in the East Fork of the Bitterroot River. The East Fork of Camp Creek is a small stream and contains mostly cutthroat trout, with a few brook trout near its mouth. Morphologically, some of the Camp Creek bull trout are pure, but others may be crossed with the more abundant brook trout. Camp Creek has a weak population of bull trout (probably a hundred breeding individuals) and may be at a high risk of extinction because it is not connected very well to any adjacent population (the closest strong population is probably Meadow Creek), and because brook trout are present. Cutthroat trout occur in adjacent drainages and in the East Fork of the Bitterroot River, have higher numbers, and are at a low risk of extinction.

Step 3 - Determination of Effects

Alternative A and B, which would be similar in the effects to the fisheries resource, would have some ground disturbing activities that could increase sediment production in the East Fork of Camp Creek. With the extensive mitigation measures (chapter II and watershed reports), project implementation over 10 years, natural recovery, and a sediment reduction program in the drainage, any sediment increases from alternative A or B should not significantly effect any sensitive fish in the East Fork of Camp Creek or downstream. Alternatives A and B would clear about 200-250 acres for ski runs, this would increase water yields. Because of past activities and wildfire, water yield increases are already a concern for channel stability. Alternatives A and B would increase this level of concern and could impact sensitive fish habitat in the East Fork of Camp Creek.

Alternative C, the no action alternative, would not change water or sediment yields. With this alternative there should be a slow natural recovery and a slow improvement in fish habitat.

Alternatives A or B may impact individual cutthroat trout in the East Fork of Camp Creek, but will not likely contribute to a trend towards federal listing or cause a loss of viability. There should not be any negative direct, indirect, or cumulative effects to cutthroat trout individuals, populations, or habitat downstream of the East Fork with any alternative. There will be no negative direct, indirect, or cumulative effects to bull trout individuals, populations or habitat with any alternative. In the long term, there