

DETAILED ANALYSIS OF DIRECT AND INDIRECT EFFECTS

Impacts to T, E, and S plant species, and regionally important plant communities

Plant communities within the SUP area may be altered as a result of the proposed projects.

Indicator:

Acres of High-Elevation Forest Type on the San Francisco Peaks, Within The SUP, and Potentially Affected by the Proposed Action

Alternative 1 – No Action

Under Alternative 1, there would be no overstory tree removal in the analysis area; therefore, the total acreage of mixed conifer and spruce-fir forest on the San Francisco Peaks would not change. The CNF would continue treatment of spruce-fir stands in the SUP infected by spruce bark beetles. These treatments would be limited to specific infected trees, which would be felled and de-barked in-place. These treatments would likely also include the use of an anti-aggregation pheromone to attempt to curtail the spread of bark beetles, but would not address overall stand condition. Past vegetation manipulation activities within the SUP area are further discussed in the Cumulative Effects section.

Alternative 2 – The Proposed Action

This alternative would result in 76.3 acres of permanent overstory vegetation removal within spruce-fir forest in the SUP. This represents about one percent of the total spruce-fir forest cover on the San Francisco Peaks and about 14 percent of the remaining spruce-fir forest in the SUP. Cutting of new ski trails would expose previously interior trees to newly-cleared edges. Some additional (secondary) mortality of trees from wind blowdown along these cleared edges would likely occur. There would be no overstory vegetation removal within the identified mixed conifer forest. Up to 22 aspen trees and 134 pine trees would be removed over 14 miles of right-of-way to allow construction of the reclaimed water pipeline.

In addition to tree removal associated with new ski trails, the Proposed Action would allow treatment of 48.4 acres of spruce-fir forest within the Agassiz and Sunset nodes to create gladed skiing terrain and to address a localized spruce bark beetle outbreak. This treatment would consist of removal of up to 20 percent of standing trees and removal of dead and down material. Tree removal would target pockets of overmature and beetle-infested trees. Removal of trees and dead and down materials would result in a more open stand with a higher diversity of size classes and greater proportion of younger vegetation structural stages. Compared with existing treatment that would occur under the No Action alternative, treatment of entire stands would be more effective in addressing the localized spruce bark beetle outbreak. It would reduce the probability of complete loss of this stand and inhibit the potential infestation of other stands in the SUP and in the adjacent Kachina Peaks Wilderness.

Noxious weeds have been found in the analysis areas, including the lower portion of the SUP and areas immediately adjacent to Snowbowl Road. The likelihood or risk of noxious weed spread is rated as moderate. Project activities under Alternative 2 may result in additional areas becoming

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