

SUMMARY OF DIRECT AND INDIRECT IMPACTS TO WILDLAND FIRE ECOLOGY AND MANAGEMENT

Impacts from the No Action Alternative

Overall, the No Action Alternative would be the **least desirable** in reducing fire size and the number of human-caused fires and improving FRCC, resulting in the **largest cost for fire suppression**. The No Action Alternative does not have any actions that address preventive measures for reducing fire occurrence. Management actions for land use authorizations and transportation and travel allow the largest opportunity for wildland fire starts due to the availability of area for development and cross-country motorized vehicle use. Campfires comprise 65% of the starts from human activity and will continue to be a primary cause due to the continued recreation actions. The number of human-caused fires in this alternative would remain static or increase due to the combined impacts from land use, transportation and travel, and recreation actions and the lack of prevention actions. The trend toward large fires would continue. The full suppression approach contains no emphasis on returning the fire regime to a less frequent large fire scenario. The majority of the planning area would remain at FRCC 2 and FRCC 3.

Overall, the No Action Alternative would result in minor impacts to the number of fires, fire size, or FRCC.

Impacts from Alternative I

Overall, Alternative I would be the **best alternative** at reducing fire size and the number of human-caused fires and improving FRCC, resulting in **the smallest costs for suppressing wildland fire**. The suppression actions in Alternative I would be second best at decreasing fire size and the number of human-caused fires. These impacts would be augmented from transportation and travel management actions, which would limit cross-country motorized vehicle use and decrease the number of human-caused fires and grazing actions, which would reduce fuel loading and help decrease fire size. This reduction in wildland fire starts may be countered by an increase in the number of human-caused fires from recreation management actions the most of all alternatives. Land use authorization management actions would also increase wildland fire starts. Suppression actions would help minimize these increases.

Alternative I would have the second largest number of acres with proposed vegetation treatments and third largest number of treatment acres in WUI. Vegetation treatments would play a major role in reducing fire size and improving FRCC. Three percent of the planning area would experience a decrease in rate of spread through fuels treatments. While Alternative I has a smaller number of WUI treatment acres and smaller decrease in the percentage of the rate of spread, the number of acres with an improved FRCC would be a major change.

Overall, Alternative I would result in major beneficial impacts to the number of fires, fire size, and FRCC.

Impacts from Alternative II

Alternative II would **decrease fire size and the number of human-caused fires over the short-term** through suppression and grazing actions, but, with no change to FRCC, **fire size would continue an upward trend over the long term**. Overall, this alternative would be third along with Alternative V in reducing fire size and the number of human-caused fires, improving FRCC, and reducing the cost of suppressing wildland fires.

The suppression actions in Alternative II would be the same as Alternative III and would be best at reducing fire size and the number of human-caused fires. These actions would be augmented by grazing actions, which would have the most impact in reducing fire size. This alternative would have the least impact in reducing the number of human-caused fires from transportation and travel management

actions, but least amount of increase of the number of human-caused fires from recreation actions. The transportation and travel and recreation management actions may counter each of their impacts on the number of human-caused fires. Land use authorization actions have the second highest increase in the number of human-caused fires, but may be countered by suppression actions such as prevention.

Vegetation treatments and livestock grazing would play the least role in improving FRCC with no increase in acres similar to S-Class reference conditions as compared to the baseline. Among the alternatives, Alternative II would have the second largest number of acres, 5,000, devoted to WUI treatments. Five percent of the planning area would have a decrease in the rate of spread through fuels treatments. While Alternative II would have the largest number of acres with WUI treatments and treatments that affect the rate of spread, the reduction in fire size and protection of WUI would be off-set by the lack of improvement to FRCC.

Overall, Alternative II would result in moderate, short-term beneficial impacts to the number of fires, fire size, and FRCC; however, long-term impacts would be minor adverse.

Impacts from Alternative III

Alternative III would **decrease fire size over the short term** through suppression and grazing actions, but **the number of human-caused fires would increase** due to impacts from recreation and land use actions. **Over the long term, fire size would continue an upward trend** due to marginal improvement to FRCC. Overall, this alternative would rank second, along with Alternative IV, in reducing fire size and the number of human-caused fires, improving FRCC, and reducing the cost of suppressing wildland fire.

Suppression actions in Alternative III would be the same as in Alternative II and would be best at reducing fire size and the number of human-caused fires. These actions would be augmented by grazing actions, which would have the second most impact in reducing fire size. Transportation and travel management actions provide the least decrease to the number of human-caused fires coupled with the second largest increase from recreation actions and third largest increase from land use authorization actions. This would be combined with an overall increase in the number of human-caused fires.

Vegetation treatments would improve FRCC on 723,000 acres, but Alternative III would rank next to last among the alternatives with regard to improvement in FRCC, and livestock grazing would further inhibit improvement to FRCC. This alternative would provide for the treatment of the most WUI acres, 6,000, and provides the highest percentage, 6%, of acres treated for reducing rate of spread. The impact from improvements to WUI and reduction in the rate of spread may be off-set with the marginal improvement, fourth best, to FRCC.

Overall, Alternative III would result in moderate, short-term beneficial impacts to the number of fires, fire size, and FRCC; however, long-term impacts would be minor adverse.

Impacts from Alternative IV (the Preferred Alternative)

Alternative IV would **decrease fire size over the long term** due to improved FRCC and reduction in rate of spread, but **fire size would continue an upward trend in the short term** until FRCC improves. The **number of human-caused fires would increase**, but to a **lesser degree** than every alternative except for Alternative V. This is due to lower amounts of recreation and land use authorizations and reduced transportation and travel. Overall, this alternative would rank second, along with Alternative III, in reducing fire size and the number of human-caused fires, improving FRCC, and reducing the cost of suppressing wildland fire.

The suppression actions in Alternative IV reduce the number of human-caused fires and fire size the least of all the alternatives. However, transportation and travel management actions would help decrease the number of human-caused fires and land use authorization and recreation activities would contribute the least to the number of human-caused fires. The low amount of grazing would be second to last in reducing fire size.

Vegetation treatments would have the largest improvement on FRCC in Alternative IV, 916,000 acres, and the amount of livestock grazing would heighten improvement of FRCC. Rate of spread would decrease on 5% of the planning area. This would be the second largest decrease among the alternatives. Along with Alternative I, Alternative IV would provide for WUI treatments on 4,000 acres; the second smallest number of acres of the alternatives. Improvements in overall FRCC would benefit the WUI by reducing fire size.

Overall, Alternative IV would result in moderate, beneficial, long-term impacts to the number of fires, fire size, and FRCC despite some minor short-term impacts.

Impacts from Alternative V

Alternative V would **decrease fire size over the short term** due to suppression actions. The **number of human-caused fires would increase**, but **at a lower rate** than the other alternatives due to the suppression actions, less recreation and land use authorizations, and more restrictive transportation and travel actions. **Over the long term, FRCC would improve and fire size would be reduced** due to vegetation treatments and the reduction of livestock grazing. This change would not be as effective as in Alternative I or IV. Overall, this alternative would rank third, along with Alternative II, in reducing fire size and the number of human-caused fires, improving FRCC, and reducing the cost of suppressing wildland fires. (DEQ, 2000)

Along with Alternative I, the suppression actions in Alternative V would be second best, at reducing fire size and the number of human-caused fires. The reduction in the number of human-caused fires would be further augmented by the most decrease in the number of human-caused fires from transportation and travel management actions and the smallest increase in the number of human-caused fires from recreation and land use actions. Fire size decreases would be off-set by possible higher amounts of fuel availability due to lower amounts of utilization, allocation, and AUMs from grazing actions.

Alternative V would have the third largest number of acres with vegetation treatments (754,000 acres), making it slightly better than Alternative III in improving FRCC. Three thousand acres of WUI would be treated. Alternative V would have the lowest reduction in rate of spread, with the exception of the No Action Alternative.

Overall, Alternative V would result in moderate beneficial impacts to the number of fires, fire size, and FRCC in both the short- and long-term.