**Cumulative Effects**

This project treats a very small percentage of the watersheds in which it is proposed to occur. For the Ruth Lake-Mad River watershed, the ERA model indicates that the existing condition is 8.8 percent; this project would add 0.4 percent for a total of 9.2 percent. The Threshold of Concern (TOC) is by compartment, which Ruth Lake-Mad River has four, and varies from 10 percent to 14.3 percent. There are no foreseeable future projects. This project would not lead to cumulative watershed effects in the Ruth Lake-Mad River watershed.

For the Barry Creek-Mad River watershed, the ERA model indicates that the existing condition is 5.5 percent; this project would add 0.4 percent for a total of 6.2 percent. This watershed does have foreseeable future actions (primarily remaining units from the Beaverslide and Kelsey Peak timber sales). Assuming that all the remaining units are treated in 2018, the ERA would increase to 6.1 percent. The TOC for Barry Creek-Mad River ranges from 13.4 to 14.9, so this watershed would remain well under threshold. This project would not lead to cumulative watershed effects in the Barry Creek-Mad River watershed.

The entire Mad River watershed is listed as impaired due to excess sediment and temperature under Section 303(d) of the Clean Water Act. Due to limited project activities in riparian reserves and 60-plus percent canopy outside of riparian reserves, stream temperature would not be affected. Some small amount of sediment may be generated by road maintenance and decommissioning activities during project implementation, but these activities are expected to reduce sediment production in the long term.