



MEMORANDUM

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TO: D.R. Moffett & Associates, Inc.
c/o Dave Moffett and John Sutherland

FROM: Travis Beck, Director of Environmental Services *TB*

CC: Ted Beeler, SE Group Principal Emeritus

DATE: October 10, 2018

RE: Leavenworth Adventure Park – Alpine Coaster Noise Impacts

SE Group has studied numerous Alpine Coasters over the past few years, primarily located on public lands. Noise generated impacts from Alpine Coasters has been a concern of the Forest Service, proximate private land owners, as well as the general public. Two common concerns from noise relate impacts to terrestrial wildlife (large mammals), and to another proximate public.

“Alpine coaster carts are generally considered to make little noise. It has been observed that the primary noise generated by the coaster is from rider-generated (yelling) noise during downhill curved sections. Coaster rides generate an average of 65 decibels for listeners 50 feet away, which is comparatively similar to normal speech at 3 feet away. The shortest distance between base area development and the coaster is approximately 150 feet away and the closest downhill curved section is 250 feet away. Based on this data, impacts to existing ambient noise levels are expected to be minimal.” (J.C. Brennan & Associates, Inc. 2010. Environmental Noise Assessment. Prepared for Northstar-at-Tahoe.)

The Leavenworth Adventure Park is expected to have similar, if not greater, distances compared to the coaster studied at Northstar Resort.

SE Group has found that due to the fact that an Alpine Coaster is dissimilar from a roller coaster in that riders are spaced at least 80 feet apart, so the consolidated noise (excited yelling) is less intensive with an Alpine Coaster.

The impact of increased noise from a coaster to wildlife depends on the sensitivity of individual species to noise and their adaptivity to human behaviors. In general, human presence (noise or not) is commonly a factor in the displacement of certain species.