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## **CLIMATE CHANGE PREDICTED TO SHIFT WOLVERINE DISTRIBUTIONS, CONNECTIVITY, AND DISPERSAL CORRIDORS**

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Recent work has shown a link between wolverine habitat and persistent spring snow cover through 15 May, the approximate end of the wolverine's reproductive denning period. We modeled the distribution of snow cover within the Columbia, Upper Missouri and Upper Colorado River Basins using a downscaled ensemble climate model. We bracketed our ensemble model predictions by analyzing warm (miroc 3.2) and cool (pcm1) downscaled GCMs. Based on the downscaled ensemble model, 67 percent of predicted spring snow cover will persist within the study area through 2030-2059, and 37 percent through 2070-2099. Contiguous areas of spring snow cover become smaller and more isolated over time, but large (>1000 km<sup>2</sup>) contiguous areas of wolverine habitat are predicted to persist within the study area throughout the 21st century for all projections. By the late 21st century, dispersal modeling indicates that habitat isolation at or above levels associated with genetic isolation of wolverine populations becomes widespread.