

# Using a single photo to determine the length and width of a road hazard. Keystone Bay, Keweenaw County, Michigan



Having only a single photo available, convergent photogrammetric techniques were not applicable. In this instance, dimensional analysis through perspective, using the traditional horizon line-vanishing point method, allowed the determination of the size of a hazard flooding on this remote road in northern Keweenaw County.

The analysis was done 3 years after the photo was taken in 2006. The vehicle in the photo, still in the fleet in 2009, was used for scale in this project.

The projected lines form a 6 ft. x 6 ft. grid. The submerged area extends to approximately 48 feet in width and 90' in length.