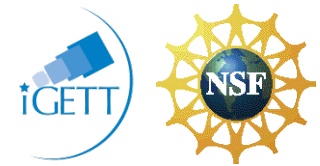


# Estimating Areas Suitable for Livestock Grazing in Wyoming



**Topic:** Agriculture, grazing

**Problem Statement:** A Wyoming ranch needs an accurate estimate of the land area that can be used for grazing.

**Level:** Intermediate

**Software:** ArcGIS, Spatial Analyst, ENVI

**Description:** Students use GIS, GPS, and satellite imagery to classify land into suitable areas of grazing on a ranch west of Casper, Wyoming. The unit can be adapted for any study site. It incorporates soil data from the NRCS and remotely sensed imagery. Students learn about the importance of watersheds and establish a watershed boundary using GIS.

**Key words:** Animal Unit Month (AUM), NRCS soil polygons, carrying capacity, watershed

