
Using GIS in Agricultural Land Assessment for Property Taxes

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Abstract

This study illustrates the application of range productivity models across a broad spatial scale. A series of relevant data layers for these range models were constructed using photo-interpretation and digital elevation models. A geographic information system was used to merge the data layers to evaluate total livestock carrying capacity for individual land parcels. This approach has application for county tax assessors interested in a scientific basis for appraising rural land values. The study was carried out in the foothills of California's San Joaquin Valley in response to policy concerns raised about the implementation of the California Land Conservation Act, a property tax system designed to conserve agricultural and open space values.
