Abstract

Change in the Central Valley, California, 1993 to 2000
Track: Environment Solutions
Author(s): Barbara Simpson, David Hansen, Chris Curlis

The Central Valley of California has been historically dominated by agricultural land use. It is experiencing rapid urban growth. There are also significant natural areas which in combination with many agricultural areas provide valuable habitat for plant and animal species. The first cycle of change detection has been completed for the time period of 1993 to 2000. In this cycle, spectral change has been identified from one major type of land cover to another major type of land cover. The focus for the project at this stage is to effectively link with other vegetation and land use mapping activities within the area and to identify techniques for discriminating between types of spectral change.

Linking with other mapping activities provides the basis for updating the change data with more current and more accurate vegetation and land use data. This is done by following commonly adopted standards between the organizations involved. Currently in California, common vegetation mapping and classification standards are being developed in concert with the national vegetation mapping and classification standards. A similar process is under way for land use mapping activities. Additional techniques for image classification are being tested using object oriented software for image segmentation and pattern recognition.

Barbara Simpson
U.S. Bureau of Reclamation
Environmental Affairs; MP-150
2800 Cottage Way
Sacramento, CA 95825-1898
USA
Phone: 916-978-5031
Fax: 916-978-5055
E-mail: bsimpson@mp.usbr.gov

David Hansen
U.S. Bureau of Reclamation
MPGIS
2800 Cottage Way
Sacramento 95825-1898
USA
Phone: 916-978-5268
Fax: 916-978-5290
E-mail: dhansen@mp.usbr.gov

Chris Curlis
U.S. Bureau of Reclamation
MPGIS
2800 Cottage Way
Sacramento 95825-1898
USA
Phone: 916-978-5030
Fax: 916-978-5055
E-mail: ccurlis@mp.usbr.gov