

Environmental Research & Information Consortium Pty Ltd (ABN) ACN (81) 055 194 771 Ph 02 4842 8182 Ph 02 6161 3716 Fax 02 4842 8183 info@eric.com.au

www.eric.com.au

# **Expert Evidence**

### INTRODUCTION

ERIC provides expert advice and evidence on the use of remote sensing to address a range of land use and management issues. Cases to date involved:

- Crop frost damage
- Crop harvesting regimes
- Crop planting
- Clearing of woody vegetation

ERIC also provides expert advice on the environmental impacts of land development proposals and land use. This includes review of the adequacy of environmental impact assessments.

## What is Remote Sensing?

Photography represents the most common form of remote sensing and provides a historic record for a particular point in time. The coverage of aerial photography used to address land use is fragmented and is generally only applicable to investigating major changes over long time intervals.

Satellite imagery is evolving as the replacement for aerial photography and has the benefits of:

- Regular and frequent acquisition
- Provision of more information
- High spatial accuracy
- Extensive archive

The extensive archive allows historic land use issues to be addressed.

Most archival satellite imagery has low spatial resolution compared to aerial photography. Small features such as trees that can often been 'seen' in aerial photography cannot be seen in satellite imagery. However, the characteristics of satellite imagery can allow the detection of trees without the need to discriminate or see individual trees. Detailed knowledge of the characteristics of the different forms of remotes sensing is needed when providing advice on what can be achieved using archival information.

#### **Applications**

Knowledge of the technology is of limited value without knowledge of the applications or use. ERIC has knowledge of critical aspects such as the physiological characteristics of crops and the nature of native vegetation that is needed to identify the capabilities and limitations of remote sensing.

#### **Experience**

ERIC personnel have produced and reviewed of all forms of land use and management plans, including environmental impact statements and assessments.

ERIC personnel have been centrally involved in a Commission of Inquiry addressing all facets of land use and in legal cases involving the monitoring of land uses such as cropping and tree clearing.

© ERIC