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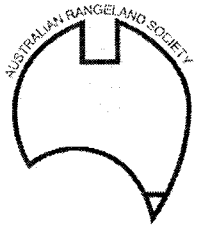

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THE OUTBACK RESOURCE ATLAS IDENTIFYING INDUSTRY DEVELOPMENT POTENTIAL IN THE SOUTHERN RANGELANDS OF WESTERN AUSTRALIA

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ABSTRACT

This paper describes the development of the Outback Resource Atlas, a web-based package consisting of an extensive database of information on regional infrastructure, tourism opportunities, meat & wool production, horticulture development potential, groundwater resources, and aquaculture. Information in the database can be viewed and queried using a GIS viewer on the internet. The package has been demonstrated to a range of potential users from contributing organisations in a number of regional centres. These presentations have provided the opportunity to target the package to specific regional issues.

INTRODUCTION

The need to develop new industries in the rangelands or pastoral region of Western Australia has been recognised for some time. To this end several regional development organisations - including the Gascoyne and Midwest Development Commissions, together with Department of Agriculture and Department of Industry & Technology - have contributed to the development of an information package to assist with the identification of development opportunities and impediments in the southern rangelands of Western Australia, a region of over 1.3 million square kilometres.

The web-based package consisting of an extensive database of information on regional infrastructure, tourism opportunities, meat & wool production, horticulture development potential, groundwater resources, and aquaculture. Information in the database can be viewed and queried using a GIS viewer on the internet. The package has been demonstrated to a range of potential users from contributing organisations in a number of regional centres. These presentations have provided the opportunity to target the package to specific regional issues.

PRODUCT DEVELOPMENT

The Outback Resource Atlas was developed with the leadership of the Gascoyne Murchison Strategy (GMS) – Commercialisation Project. The goal of this project is a socially and economically viable community, involved in a diverse range of industries, based on the use of the rangelands in an environmentally sustainable way.

The GMS Board has established the Regional Based Alternatives Sub-committee (RBASC) to oversee the Commercialisation Project. RBASC membership includes:

Department of Industry and Technology, Mid-West Development Commission, Gascoyne Development Commission and the Department of Agriculture - Western Australia (DAWA). Key stakeholders in the GMS are Gascoyne & Murchison pastoralists - some 240 businesses, other community members (support industries), commercial investors, State Government (Departments, Agencies, Commissions, Rural Assistance Fund) and the Rural Adjustment Scheme (Commonwealth).

In April 2001 the GMS Commercialisation project contracted the expertise of DAWA staff involved in its Client & Resource Information System Project (CRISP) to develop ORA in conjunction with

specialists from the Water and Rivers Commission (Hydrogeological Section). A total of 63 datasets were collated to develop the ORA. Information not held by the Department was obtained from other agencies and industry bodies. These data were simplified with advice from the data custodians. Datasets used to develop the ORA include: soil characteristics, historical climate information, site specific infrastructure (roads, airstrips, ports, gas pipelines, power and facilities such as schools and hospitals, business centres, aboriginal communities), current tenure and land-use, property contact details, livestock distribution, National Parks and Reserves, location of currently exploited mineral resources, GMS Pathways to Tourism study findings and ground-water resources.

PRODUCT DELIVERY AND OUTPUTS

The ORA is accessed through a web-based GIS viewer based on Intergraph's Geomedia Web Map software. GIS data relating to regional infrastructure and natural resources is accessed through a browser-based interface. Vector data in a number of GIS formats (Geomedia Access Data Warehouse, Arcview Shapefile and ORACLE Spatial) are published to the web browser using a CGM (Computer Graphics Metafile) graphics file.

Information about map features is delivered through ActiveCGM Tool Tips and Hotspots and through customised visual basic applications (Active Server Pages). General information about resources in the region is also provided in static PDF (Acrobat) format maps activated through HTML pages.

The ORA design format makes it a key component of the Rangeland Interface of the Client & Resource Information System.

Key outputs from the are:

- identification of current and potential resources,
- readily accessible information for primary producers and potential investors to aid in the planning, implementation and development of new or the expansion of existing industries,
- increased coordination of similar projects and knowledge across government agencies and
- facilitation of the development of submissions for seed funding to establish new industries in the Southern Rangelands region.

ACCESS TO THE ORA AND LIMITATIONS

The Outback Resource Atlas has been developed to help public officers identify local and regional industry development opportunities / impediments. State Government Departments with duly trained officers on staff currently have access to the ORA. Members of the public with commercial / investment interests can access the ORA through such public officers.

While the ORA may help identify opportunities (such as the location of suitable water resources for the possible commercial production any particular crop), the information provided must be subjected to further proving-up and / or testing.

The currency of the intelligence extracted from the ORA is directly related to that provided by the information received from its original source. It is the responsibility of the officer providing the information to ensure end-users are made aware of these inherent limitations and also formally alert CRISP staff of any and all uncovered currency deficiencies.

The authors gratefully acknowledge very significant funding from the Gascoyne-Murchison Strategy for the development of the ORA. Contributions were also made by the Midwest Development Commission and the Gascoyne Development Commission. These organisations, as well as the Goldfields-Esperance Development Commission, also provided valuable feedback through a series of workshops held in regional locations during the development of the product.