Project No N703: Regional Assessment of the Conservation Status of Vegetation Units throughout Western Australia.

Progress Report, 10 May, 1995

Project Background

- 1. The aim of the project is to provide an up-to-date assessment of the conservation status of the vegetation units described and mapped by J.S. Beard (and F.G.Smith) within Western Australia at a scale of 1:250,000.
- 2. The timetable for the project involves:
 Year 1: assembling and integrating the various data sets in a structured GIS
 environment and then undertaking the polygon overlay for the South West Botanical
 Province and Interzone, and redefining the Biogeographic Regionalisation; and
 Year 2: undertaking the polygon overlay for the Eremaean and Northern Botanical
 Province, producing detailed reports on the results of the polygon overlays for the
 whole State, and preparing a revised vegetation map of the State.

Data Sets

- 3. The project draws mainly on four existing digital data sets:
 - *Beard's (& Smith's) Vegetation of Western Australia as mapped at 1:250,000,
 - *CALM's Land Tenure Information System, and
 - *Remnant Vegetation in the South West and Eucla Land Divisions.
 - *the Interim Biogeographic Regionalisation of Australia.

Other relevant data sets will be used in the course of the analyses to refine the results of analyses.

- 4. The vegetation data have been captured from the original line work prepared at the scale of 1:250,000. The process of correction/validation of the vegetation data is nearing finalisation. In the course of doing this work, it has been necessary to develop a new taxonomy of vegetation types for the State which explicitly recognises the relationships between types in a heirarchical fashion. A substantial number of disparities between the original line work and the published 1:1,000,000 maps have come to light. Appropriate corrections are being made to the digital data as part of the validation process.
- 5. ERIN's digital version of the Interim Biogeographic Regionalisation of Australia has been matched with the vegetation data. The Regionalisation is currently undergoing spatial improvement to provide compatibility with the vegetation data (from which the boundaries were originally derived): this work is in its final stages.
- 6. Cadastral information and tenure details for all CALM lands, derived from the Department's Land Tenure Information System (TENIS), have been reformatted to facilitate appropriate analyses.

- 7. The overlay of the vegetation data with the CALM estate for the South West Botanical Province, the Interzone, and the Eremaean and Northern Botanical Provinces, has been completed. ORACLE tables of area calculations are currently being reformatted to provide data summaries for the final reports.
- 8. Development of the remnant vegetation data base is proceeding independently of this project as part of the Department of Agriculture's component of the Remnant Vegetation Protection Scheme. The data base will be interrogated once the results of the vegetation/CALM estate overlay are available.
- 9. Preparation of a revised vegetation map of the State is proceeding.

Project Management.

- 10. The completed contract was received by the Department of Conservation and Land Management on 10 May 1994. The initial payment for the project was received on 26 May 1994. The Chart of Accounts was created on 24 June 1994.
- 11. On 20 June 1994 a consultant commenced working on the project. The consultant is Mr Julian Coker of 13 Adina Way, Rockingham, WA 6181. Mr Coker has a MSc in Remote Sensing and Digital Cartography from the University of Dundee and has experience in operating in both Arc/Info and Integraph environments.
- 12. As of 30 April 1995, payments to Mr Coker totalled \$26,285.20. A further \$14,000 has been committed. Departmental administrative costs totalling \$200 have been charged against the project. Purchases of vegetation, soils and landform maps and memoranda totalling \$126.50 have also been charged against the project.
- 13. Project supervision and scientific input for the project, contributed by CALM, has totalled 900 hours.
- 14. Technical support has been provided by the Department of Agriculture. The estimated value of this support is \$25,000.
- 15. The project is running about 6 weeks behind schedule: this is due to a combination of factors which include problems with the data, technical difficulties encountered in handling very large data sets and illness.